

1995®



YÖS

YABANCI ÖĞRENCİ SINAVLARI
FOREIGN STUDENT EXAMINATIONS

GENEL
YETENEK

IQ 3

SORU BANKASI
QUESTION BANK

174 Konu Testi
Subject Tests

1842 Test Sorusu
Test Questions

10 Deneme Sınavı
Trial Exams

450 Deneme Sorusu
Trial Exam Questions

Türkiye'de ve Dünyada!
In Turkey and Around the World!

METROPOL YAYINLARI

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ÖNSÖZ

Değerli öğrenciler,

Metropol Eğitim Kurumları, 1995'den bugüne üniversite giriş sınavlarına hazırlanan öğrencilere kurs, yayın ve rehberlik hizmetleri sunan, Türkiye'de ve Dünyanın farklı ülkelerinde şube ve temsilcilikleri bulunan uluslararası bir eğitim kurumları zinciridir.

Kurumlarımız, Türkiye üniversitelerinin gerçekleştirdikleri Yurtdışından Öğrenci Kabul Sınavları ya da bilinen adıyla Yabancı Uyruklu Öğrenci Sınavlarına (YÖS) hazırlanan ve bu üniversitelerde yüksek öğrenim görmeyi hedefleyen yabancı uyruklu ve T.C. vatandaşlığı öğrencilere kurs, yayın ve danışmalık hizmetleri vermektedirler.

Türkiye'nin onde gelen üniversitelerinin düzenledikleri bu sınavlarda (YÖS), Temel Öğrenme Becerileri Testi ve Türkçe Yeterlilik Testi olmak üzere iki ayrı test yer almaktadır. Sınavlardaki Türkçe testleri, sınava katılan öğrencilerin Türkçe dil yeterliliklerini ölçmek için uygulanmaktadır, yerleştirme puanlarını etkilememektedir. Temel Öğrenme Becerileri Testleri ise sınavların değerlendirilmelerinde ve üniversitelere kabul aşamalarında dikkate alınmakta ve yerləşirmeler bu testlerin sonuçlarına göre yapılmaktadır.

Bu nedenle, sınavlarda başarılı olabilmek için öncelikle Temel Öğrenme Becerileri Testlerinde baraj olarak belirlenen puanları aşmanız ve hedeflediğiniz puanlara ulaşmanız gerekmektedir.

Sınavlardaki Temel Öğrenme Becerileri Testlerinde Genel Yetenek (IQ), Matematik ve Geometri soruları yer almaktadır; bu testlerin ortalama olarak % 40'ının Matematik sorularından oluşan dikkate alındığında, bu soruları doğru yanıtlanmanız sınavların başarı sıralamalarında öne çıkmazsa sağlayacaktır.

Türkiye'nin seçkin üniversitelerinde öğrenim görebilme şansını yakalayabilmek için YÖS hazırlık kurslarına katılmanızı ve yayınlarımızı hazırlamış olan, alanında uzman ve deneyimli öğretmenlerimizden destek almanızı öneriz.

Tüm YÖS adaylarına başarılar dileriz!



**METROPOL EĞİTİM KURUMLARI
METROPOL EDUCATIONAL INSTITUTIONS**

PREFACE

Dear students,

Metropol Educational Institutions are a group of international educational institutions since 1995 which have been offering services such as training, publications and consultancy to students who are studying for the university entrance exam and which have branches and representations in Turkey and different countries in the world.

Our Institutions provide courses, publications and consultancy services to foreign and Turkish students who are preparing for the Foreign Students Acceptance Exams alias Foreign Students Exams (YÖS) which are held by the universities in Turkey.

In these exams (YÖS) held by the renowned universities in Turkey, there are two separate tests; Basic Learning Skills Test and Turkish Language Test. The Turkish Language Tests applied in the exams are intended to measure the Turkish language skills of the students who enter the exam and it does not effect on the placement score. The Basic Learning Skills Test is taken into consideration in the evaluation processes of the exams and in the acceptance processes by the universities; the placements are performed according to the results of these tests.

Therefore, in order to be successful in the exams, first of all you need to get higher scores than the base point determined for the Basic Learning Skills Test and reach the scores that you have targeted.

The Basic Learning Skills Tests include Intelligent Quotient (IQ), Mathematics and Geometry questions; considering that Mathematics comprises of the 40% of the questions averagely, giving the correct answers to these questions enables you to come to the forefront in the success ratings of these tests.

We suggest that you participate in YÖS preparation courses and obtain support from expert and experienced teachers who prepare the publications in order to have the chance to receive education in the respected universities of Turkey.

We wish luck to all YÖS candidates!

VORWORT

Liebe Schülerinnen und Schüler,

Die Metropol Bildungsinstitution ist eine internationale Kette, die seit 1995 mit Dienstleistungen wie Schulungen, Publikationen und Beratungen Schüler/-innen auf die Studienberechtigungsprüfung vorbereitet und sowohl in der Türkei als auch in verschiedenen Ländern der Welt Niederlassungen und Vertretungen besitzt.

Unsere Institutionen unterstützen Schüler/-innen türkischer und ausländischer Staatsbürgerschaft, die sich auf die Prüfungen zur

Aufnahme von ausländischen Schülern/-innen alias Prüfung für auslandsstämmige Schüler/-innen (YÖS), die von den Universitäten in der Türkei veranstaltet werden, vorbereiten und an diesen Universitäten studieren möchten.

Die von renommierten Universitäten angebotene Prüfung (YÖS) ist in zwei Bereichen erfolgreich zu bestehen. Der erste Teil betrifft die Fähigkeit Grundlagenkenntnisse zu erwerben, wobei der zweite Teil die Sprachkenntnisse im Türkischen prüft.

Mit Hilfe dieser Eignungstests werden die türkischen Sprachkenntnisse der Schüler/-innen ermittelt, dabei haben sie keinen Einfluss auf die Platzierungspunkte. Ausschlaggebend für die Platzierung der Bewerber/-innen an den Universitäten ist der Grundlernfähigkeitstest, bei dem die allgemeine Mindestpunktzahl der Prüfung und die erforderliche Punktzahl des erstrebten Studienfachs zu erreichen ist.

Dieser Test beinhaltet Fragen zur allgemeinen Fähigkeit (IQ), Mathematik und Geometrie. In Anbetracht der Tatsache, dass der Mathematik 40% der Prüfung darstellt, ist es für Sie von Vorteil den Fokus auf diesen Bereich zu legen, um unter die Besten zu kommen.

Um an den renommierten Hochschulen der Türkei studieren zu können, empfehlen wir Ihnen, an unseren YÖS-Vorbereitungskursen teilzunehmen und sich von unseren kompetenten und erfahrenen Lehrkräften, die die Publikationen vorbereitet haben, unterstützen zu lassen.

Wir wünschen allen YÖS Kandidaten viel Erfolg!

ВСТУПЛЕНИЕ

Уважаемые студенты!

Образовательные учреждения Metropol – это международная сеть учебных заведений, которая с 1995 года по сегодняшний день предоставляет для студентов, готовящихся к вступительным экзаменам в университет, поддержку в виде курсов, публикаций и консультаций.

Образовательные учреждения Metropol имеют филиалы и представительства в Турции и в разных странах мира.

Наши учреждения оказывают поддержку иностранным и турецким студентам, которые нацелены получить высшее образование в университетах Турции и готовятся к сдаче вступительных экзаменов для иностранных студентов, известных как экзамены для иностранных студентов YÖS, проводящихся данными университетами.

Экзамены YÖS организуются ведущими университетами Турции и состоят из двух отдельных частей: теста "Основные навыки обучения" и экзамена на знание турецкого языка. Тест на знание турецкого языка включен в экзамен для определения уровня владения турецким языком студентов, сдающих экзамен, и на распределение результатов не влияет. Распределение осуществляется на основании результатов теста "Основные навыки обучения", который принимается во внимание при оценке экзамена и на этапе приема в университет.

Поэтому, для того, чтобы успешно сдать экзамены, прежде всего, Вы должны получить более высокий балл, чем граничный балл, определенный для теста "Основные навыки обучения", и достичь запланированной оценки.

Экзаменационный тест "Основные навыки обучения" содержит вопросы на уровень интеллекта (IQ), вопросы по математике и геометрии. Учитывая, что 40% вопросов теста составляют вопросы на уровень интеллекта (IQ), правильно

Для того, чтобы иметь возможность получить образование в элитных вузах Турции, мы предлагаем вам принять участие в подготовительных курсах YÖS и получить поддержку наших опытных преподавателей, которые являются специалистами в своей области и готовят наши публикации.

Мы желаем успехов всем кандидатам, готовящимся к экзамену YÖS!



METROPOL BILDUNGSISTITUTIONEN
ОБРАЗОВАТЕЛЬНЫЕ УЧРЕЖДЕНИЯ METROPOL

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BÖLÜM 01

CHAPTER

Bölüm / Chapter 1

Şifreler / Passwords

Test 1

ŞİFRELER PASSWORDS

1. $\left. \begin{array}{l} \text{TEF} \\ \text{ÜYE} \\ \text{FEN} \\ \text{ÜTÜ} \\ \text{OTO} \end{array} \right\} \Rightarrow \text{TEF} = ?$

A) 682 B) 518 C) 464
D) 283 E) 565

2. $\begin{array}{c} \text{DİL} \\ \text{ÇİM} \\ \text{LOŞ} \\ \text{AZA} \\ \text{DAM} \end{array} \left. \begin{array}{l} \\ \\ \\ \\ \end{array} \right\} \Rightarrow \text{LOŞ} = ?$

3. $\left. \begin{matrix} \text{KAS} \\ \text{ABA} \\ \text{BAL} \\ \text{EBE} \\ \text{SEL} \end{matrix} \right\} \Rightarrow \text{BAL} = ?$

A) 572 B) 679 C) 454
D) 942 E) 757

4. $\left. \begin{array}{l} \text{LAF} \\ \text{DEF} \\ \text{KAP} \\ \text{BEZ} \\ \text{ARK} \end{array} \right\} \Rightarrow \text{KAP} = ?$

A) 931 B) 536 C) 748

5. ANí
NAZ
LAV
FIN
KAV } \Rightarrow ANí = ?

6. **SARI**
KASA
KURS
AMAÇ
ÇARK } \Rightarrow **KURS = ?**

A) 2383 B) 2178 C) 3435
D) 5372 E) 8379

7. **KEDİM**
KIZDA
ZEKAN } \Rightarrow **DİNAR = ?**
DİNAR
NEDİM
- A) 70451 B) 90726 C) 45623
D) 78942 E) 60451

8. **MELAMET**
KEFALET
SELAMET } \Rightarrow **SEFARET = ?**
SEFALET
SEFARET
- A) 5460943 B) 8460743 C) 5460743
D) 1470143 E) 5470143

9. **SOR**
KES
SER } \Rightarrow **SER = ?**
KOR
FES
- A) 926 B) 845 C) 526
D) 945 E) 546

10. **9623485**
4626931
6571348 } \Rightarrow **4626931 = ?**
6176435
4657261
- A) KELEPİR B) PELİKAN C) ENTRİKA
D) KENTLER E) ERTEKİN

11. **496897**
136408
792136 } \Rightarrow **792343 = ?**
792343
752136
- A) PARLAK B) KANSER C) KONSER
D) SERPİL E) KANEPE

12. **924**
429
324 } \Rightarrow **324 = ?**
415
475
- A) KOÇ B) TOK C) ÇOK
D) KAŞ E) KUŞ

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	D	A	C	D	B	C	A	E	A	E	B

1. RIDVAN = TKGAÇP

ŞABAN = UÇDÇP

⇒ ŞADIRVAN = ?

A) UÇDÇPTG

B) UÇTAGKAÇP

C) UÇGKTAÇP

D) UÇĞITAÇPT

E) UÇTGTAÇP

2. KALEM = LCOHR

⇒ KUMAŞ = ?

A) MYOCT

B) ŞAMUK

C) LORCT

D) MNODY

E) LVÖDV

3. SAĞLIK = VEKPMÖ

⇒ KIRMIZI = ?

A) ÖMÜRMDM

B) GFMIFSE

C) ABDCBKB

D) ÖLÜPLEL

E) ĞEMIETE

4. FES }
SEL }
TEL }
DİZ }
FİL }

A) 675

B) 975

C) 479

D) 415

E) 812

5. SER }
KES }
SOR }
FES }
KOR }

A) 926

B) 845

C) 526

D) 546

E) 945

6. I. C E B } 9 3 7
K E B } 8 3 7
K A L } 5 6 7
L A B } 9 6 5
B A K } 7 6 9

⇒ BAK = ?

A) 965

B) 837

C) 567

D) 769

E) 937

7.

$$\begin{array}{c} \text{I.} \\ \begin{array}{l} \text{K A L E} \\ \text{R A K I} \\ \text{A K I L} \\ \text{A L I K} \\ \text{K A R A} \end{array} \end{array} \times \left\{ \begin{array}{c} \text{II.} \\ \begin{array}{l} 4 \ 3 \ 2 \ 8 \\ 5 \ 3 \ 4 \ 1 \\ 4 \ 3 \ 5 \ 3 \\ 3 \ 4 \ 1 \ 2 \\ 3 \ 2 \ 1 \ 4 \end{array} \end{array} \right\}$$

$\Rightarrow \text{ARALIK} = ?$

- A) 545341 B) 151234 C) 414328
 D) 353214 E) 252412

8.

$$\left. \begin{array}{l} 4301 \\ 1918 \\ 1652 \\ 7657 \\ 4163 \end{array} \right\} \Rightarrow 4301 = ?$$

- A) BALO B) ALGI C) İLGİ
 D) BOĞA E) ARAÇ

9.

$$\left. \begin{array}{l} 82194 \\ 15627 \\ 65358 \\ 12754 \\ 12094 \end{array} \right\} \Rightarrow 82194 = ?$$

- A) BARUT B) DURUM C) BUDAR
 D) MABET E) BAGET

10.

$$\left. \begin{array}{l} \text{NURAY} \\ \text{ŞENAY} \\ \text{AYSEN} \\ \text{AYNUR} \\ \text{YASİN} \end{array} \right\} \Rightarrow \text{NURAY} = ?$$

- A) 91024 B) 19364 C) 47519
 D) 19475 E) 36419

11.

$$\left. \begin{array}{l} \text{YERSEL} \\ \text{SINTER} \\ \text{TERHİS} \\ \text{SİHHAT} \\ \text{NİSTER} \end{array} \right\} \Rightarrow \text{NİSTER} = ?$$

- A) 786345 B) 045749 C) 687345
 D) 345187 E) 781123

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12.

$$\left. \begin{array}{l} 1796 \\ 9786 \\ 6863 \\ 7826 \\ 4756 \end{array} \right\} \Rightarrow 9786 = ?$$

- A) SOBA B) AYAR C) BOYA
 D) KOVA E) OYMA

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
C	C	A	C	A	D	D	D	D	C	C	C

1. $\begin{array}{l} 523 \\ 123 \\ 526 \\ 423 \\ 623 \end{array} \Rightarrow 623 = ?$

- A) SEL B) SEK C) TEL
D) YEL E) KEL

2. $\begin{array}{l} POJ \\ HAP \\ PAH \\ POB \\ TAB \end{array} \Rightarrow POJ = ?$

- A) 615 B) 376 C) 673
D) 619 E) 475

3. $\begin{array}{l} NIH \\ NIÇ \\ LIN \\ NIF \\ LİK \end{array} \Rightarrow LIN = ?$

- A) 351 B) 354 C) 957
D) 350 E) 953

4. $\begin{array}{l} ŞOK \\ LIK \\ SAT \\ KAB \\ KEÇ \end{array} \Rightarrow KEÇ = ?$

- A) 382 B) 217 C) 256
D) 902 E) 314

5. $\begin{array}{l} MUY \\ ZET \\ MUK \\ MEC \\ MEZ \end{array} \Rightarrow MEC = ?$

- A) 725 B) 738 C) 620
D) 726 E) 731

6. $\begin{array}{l} ELÜG \\ EMÜF \\ EMÜK \\ EVÜN \\ ERÜK \end{array} \Rightarrow EMÜF = ?$

- A) 4817 B) 4019 C) 4213
D) 4615 E) 4613

7. İNED
EMİK
ENİS
KİNE
LİME

- A) 0543 B) 2593 C) 5936
D) 3452 E) 3957

⇒ KİNE = ?

8. KÜLLÜ
CÜPPE
TAKKE
HOPPA
TEKKE

- A) 21337 B) 27337 C) 65441
D) 38008 E) 98447

⇒ CÜPPE = ?

9. KAYGU
BAKAN
BENAN
DUYGU
YAKUP

- A) 42532 B) 10797 C) 69532
D) 19697 E) 59628

⇒ KAYGU = ?

10. TAVUK
TÖVBE
TAVAR
TÜRKBE
TABUR

- A) 37192 B) 34692 C) 38681
D) 38605 E) 38901

⇒ TÖVBE = ?

11. CBCBC
FDFDF
ESESE
BABAB
DCDCD

- A) 51515 B) 65656 C) 42424
D) 30303 E) 13131

⇒ ESESE = ?

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12. HİLAL
SİLAH
DELİL
HİTİT
LAHİT

- A) 93425 B) 42531 C) 53131
D) 76434 E) 53424

⇒ LAHİT = ?

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	D	E	C	A	D	B	E	C	B	C	B

1. İŞTE
AŞAN
İTEN
ATES
ŞİSE

- A) $\bullet \triangle \star \square$
D) $\bullet \square \bullet \circ$

- B) $\blacksquare \triangle \star \circ$
E) $\square \blacksquare \square \star$

- C) $\blacksquare \square \triangle \star$

\Rightarrow

ITEN = ?

2. 8574
6475
8765
5487
5648

- A) $\blacksquare \star \circ \square$
D) $\star \circ \bullet \square$

- B) $\square \blacksquare \bullet \circ$

- C) $\square \bullet \star \blacksquare$

- D) $\star \circ \bullet \square$

- E) $\blacksquare \circ \square \bullet$

3. $\square \circ \blacksquare \triangle$
 $\circ \bullet \square \blacksquare$
 $\square \bullet \triangle \star$
 $\bullet \star \triangle \blacksquare$
 $\triangle \blacksquare \triangle \bullet$

- A) 1-6-5-3
D) 1-4-3-2

- B) 6-4-1-5
E) 3-5-3-4

- C) 4-2-3-5

4. $\square \triangle \square \bullet$
 $\star \blacksquare \triangle \blacksquare$
 $\triangle \blacksquare \bullet \square$
 $\blacksquare \star \blacksquare \bullet$
 $\square \triangle \blacksquare \star$

- A) AKAN

- B) SANI

- C) ISIN

D) KASA

E) ISAK

\Rightarrow

ITEN = ?

5. TAT
AZA
MAT
ZAM
MUM

A) $\blacksquare \triangle \star$
B) $\star \triangle \star$

- C) $\blacksquare \circ \square \blacksquare$

- D) $\bullet \triangle \blacksquare$

- E) $\triangle \bullet \triangle$

\Rightarrow

ITEN = ?

6. TAVAN
KAPAN
KOVAN
TAVLA
SAPAN

A) $\rightarrow \triangle \blacksquare \triangle \nabla$
B) $\nabla \triangle \star \triangle \nabla$
C) $\circ \triangle \blacksquare \triangle \nabla$

- D) $\circ \bullet \star \triangle \nabla$

- E) $\nabla \triangle \star \bullet \triangle$

\Rightarrow

ITEN = ?

$$\left. \begin{array}{r} 68452 \\ 63935 \\ 13573 \\ 35739 \\ 73925 \end{array} \right\} \Rightarrow 73925 = ?$$

- A) SEMER B) DEMİR C) PERDE
D) ERDEM E) SABRİ

$$\left. \begin{array}{r} 1918 \\ 4301 \\ 1652 \\ 7657 \\ 4163 \end{array} \right\} \Rightarrow 4301 = ?$$

- A) BOĞA B) İLGİ C) BALO
D) ARAÇ E) ALGI

$$\left. \begin{array}{r} \text{CİCİ} \\ \text{AMMA} \\ \text{İMAM} \\ \text{MAMA} \\ \text{CAMİ} \end{array} \right\} \Rightarrow \text{İMAM} = ?$$

- A) 3434 B) 3254 C) 5252
D) 2552 E) 4525

$$\left. \begin{array}{r} \text{ZYUN} \\ \text{ATON} \\ \text{TOAZ} \\ \text{OZAN} \\ \text{NAZİ} \end{array} \right\} \Rightarrow \text{NAZİ} = ?$$

- A) 9873 B) 3492 C) 4153
D) 1549 E) 5943

$$\left. \begin{array}{r} \text{TEPKİ} \\ \text{RESET} \\ \text{RASIT} \\ \text{TESTİ} \\ \text{TESİR} \end{array} \right\} \Rightarrow \text{TESTİ} = ?$$

- A) 78583 B) 38219 C) 38539
D) 76543 E) 38597

$$\left. \begin{array}{r} \text{BAHAR} \\ \text{HİŞİM} \\ \text{KUMAŞ} \\ \text{KAMİŞ} \\ \text{BAKIM} \end{array} \right\} \Rightarrow \text{KUMAŞ} = ?$$

- A) 37271 B) 25856 C) 97658
D) 37956 E) 94678

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	D	B	E	D	B	A	E	B	C	E

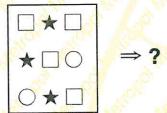
1.

I.	II.
E L E K	□ ■ □ ○
K E D I	★ △ ★ △
I L İ K	△ ■ △ ○
D E D E	■ △ ○ △
L E K E	○ △ ★ □

 $\Rightarrow \text{EKİLDİ} = ?$

- A) □ ○ □ ■ ★ □
 B) □ ■ ○ ★ □ ○
 C) ★ □ ○ ■ □ ○
 D) ■ ○ △ ★ △ ○
 E) ○ △ ■ □ ■ ■ ★

2.

 $\Rightarrow ?$

- A) 132 B) 313 C) 313
 221 233 132
 231 121 213
 D) 321 E) 221
 132 132 313
 231 313

3.

I.	II.
R E N K	1 2 3 6
K A R K	2 5 1 8
K A R T	6 2 5 6
T A N K	5 4 3 6
A R T I	6 2 5 1

 $\Rightarrow \text{KENAR} = ?$

- A) 64325 B) 62435 C) 36215
 D) 31256 E) 13258

Şifreler / Passwords

4.

I.	II.
A S K I M	1 5 3 2 4
K A S I M	4 1 3 1 5
K A S K I	3 1 5 3 2
S U M A K	5 9 4 1 3
M A K A S	3 1 5 2 4

 $\Rightarrow \text{MUSKA} = ?$

- A) 41526 B) 14325 C) 49531
 D) 39215 E) 13524

5.

JÖLE	$\Rightarrow \text{KALE} = ?$
MİLE	
KASA	
KALE	
MANA	

- A) 9542 B) 1342 C) 6707
 D) 6742 E) 1787

6.

HARE	$\Rightarrow \text{KARE} = ?$
HANE	
PAYE	
KARE	
VADE	

- A)
 B)
 C)
 D)
 E)

7. **BARIŞ
GELİŞ
DİDİN
KONUŞ
ŞAŞIR**

- = **KONUS = ?**
- A)
 - B)
 - C)
 - D)
 - E)

8. **ÇALIŞ = BÜĞÇE
⇒ BAŞAR = ?**

- A) KULMN
- B) SMNMV
- C) ZÜNSİ
- D) YÜJÜÜI
- E) YUMUN

9. **I.
K E L E B
K E L B E
S E L E Z
K E L E M
S E L E D**

II.

1	4	7	4	2
8	4	7	4	5
8	4	7	4	9
8	4	7	5	4
1	4	7	4	3

= **KELEBEK = ?**

- A) 1474241
- B) 8474548
- C) 8474948
- D) 1475484
- E) 5474845

10. **AZMI
SİNÉ
ASİN
İVİK
ANAV**

= **ANAV = ?**

- A) 9197
- B) 5251
- C) 5692
- D) 5389
- E) 6924

11. **ADAMAK
OLUMLU
OKULLU
ILIMLI
DOLUNCA**

= **OLUMLU = ?**

- A) 987687
- B) 282682
- C) 343631
- D) 498753
- E) 917887

12. **GİRNE
ENGİN
FİYAT
YATIR
YENGE**

= **FİYAT = ?**

- A) 21078
- B) 93210
- C) 45635
- D) 24564
- E) 63854

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	A	C	D	E	A	D	B	B	A	B

1.

KEK
SAT
NAS

 $\Rightarrow ?$

A) 4 V 4

 $\wedge \cap \triangle$
 $\wedge \cap \circ$

B) 4 V 4

 $\wedge \cap \triangle$
 $\cup \cap \wedge$
C) $\square \vee \diamond$
 $\wedge \cup \triangle$
 $\cup \wedge \cup$

D) 4 V 4

 $\wedge \circ \triangle$
 $\cup \cap \wedge$
E) 4 V \diamond
 $\wedge \cap \triangle$
 $\cup \cap \wedge$

4.

ASAR
SIRA
TASA
ATAR
ASIR

 $\Rightarrow ASAR = ?$ A) $\square \downarrow \triangle \downarrow$ B) $\triangle \otimes \circ \downarrow$ C) $\downarrow \square \downarrow \circ$ D) $\downarrow \triangle \downarrow \circ$ E) $\downarrow \triangle \otimes \circ$

2.

KELP
EKLE
RENK
PELE
LEKE

 $\Rightarrow RENK = ?$ A) $\blacktriangle \uparrow \circ \downarrow$ B) $\otimes \uparrow \square \uparrow$ C) $\downarrow \uparrow \square \otimes$
D) $\square \uparrow \downarrow \uparrow$ E) $\uparrow \downarrow \square \uparrow$

5.

79894
59892
91849
72857
63963

 $\Rightarrow 63963 = ?$

A) 75827

B) 03703

C) 97872

D) 94819

E) 17874

3.

SEK
TER
YER
REY
KES

 $\Rightarrow TER = ?$ A) $\blacktriangle \downarrow \otimes$ B) $\triangle \downarrow \square$ C) $\square \downarrow \uparrow$
D) $\otimes \downarrow \blacktriangle$ E) $\uparrow \downarrow \square$

6.

74590
92616
12378
38754
50962

 $\Rightarrow 50962 = ?$

A) 40698

B) 31245

C) 25460

D) 78321

E) 68979

7. **LOL**
MAG
TUT
ŞUD
SUS } \Rightarrow **MAG = ?**
- A) 863 B) 404 C) 252
D) 951 E) 757

8. **ÇEM**
LİB
LAH
ENE
MİÇ } \Rightarrow **LİB = ?**
- A) 752 B) 545 C) 301
D) 207 E) 368

9. **ŞEK**
REH
YEM
KES
MEY } \Rightarrow **REH = ?**
- A) 641 B) 942 C) 249
D) 047 E) 146

10. **ŞOL**
ALE
RİB
KAZ
ELİ } \Rightarrow **ALE = ?**
- A) 832 B) 547
D) 169 E) 490

11. **İKİ**
LİS
UNO
NÜG
OLA } \Rightarrow **UNO = ?**
- A) 529 B) 876
D) 743 E) 202

12. **REMSE**
REMEK
LEMEC
REMES
LEMET } \Rightarrow **REMSE = ?**
- A) 26364 B) 96368
D) 26356 E) 96367

METROPOL YAYINLARI • METROPOL PUBLICATIONS


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	A	B	D	B	A	A	C	D	E	B	D

1. TAKI
KAYA
YAKI
AKIL
YAKA

- A) 4957 B) 9578 C) 5949
D) 4959 E) 3957

⇒ YAKI = ?

2. KEP
TET
PEK
KET
TEK

- A) 203 B) 101 C) 201
D) 102 E) 302

⇒ TEK = ?

3. EMİN
NAME
MASA
NANE
ÇİNİ

- A) 5141 B) 6787 C) 8189
D) 9578 E) 8159

⇒ MASA = ?

4. ÇAKIR
SATIR
BAKIR
KATIR
TAKIR

- A) 82145 B) 72345 C) 12345
D) 62345 E) 32145

⇒ KATIR = ?

5. SAKİ
AKAR
SAİK
KİRA
RAKS

- A) 4231 B) 1352 C) 5214
D) 2125 E) 4213

⇒ KİRA = ?

6. DEMİR
NADİR
SELEN
MELEK
SAKAR

- A) 03137 B) 63028 C) 94748
D) 54628 E) 93135

⇒ NADİR = ?

METROPOL PUBLICATIONS

METROPOL YAYINLARI

7. SONU
ESEN
KESE
AYAK
YAYA

- A) 1848 B) 2321 C) 3232

D) 8485 E) 4657

8. TAMA
AMİR
LAMA
İRAT
MANİ

- A) 2967 B) 4929 C) 7390

D) 0929 E) 9273

9. İSTİMAL
İSTEKLİ
İSTİHZA
İSKEMLE
İSKELET

- A) 5734205 B) 5724043 C) 5724804

D) 5735619 E) 5735890

10. SEYREK
KIVRIK
KÖSELE
LEVREK
LEYLEK

- A) 163761 B) 594791 C) 125909

D) 093791 E) 094091

11. EYYAM
KELLİ
KISSA
ÇİMME
SAÇIK

- A) 23091 B) 19223 C) 65534

D) 16778 E) 08446

12. ÇARE
KÖLE
İCAT
EBAT
MANİ

- A) KCLM B) FGCÇ C) DCEF

D) MBCÇ E) IHJF

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	D	A	E	B	D	A	A	A	D	B	B

1. PAZAR
SITEM
ASTAR
TESİR
KIRAZ

- A) 70546 B) 91816 C) 34618
D) 15716 E) 54702

$\Rightarrow \text{SITEM} = ?$

2. DOST
VEDA
STOK
LALE
ALEV

- A) 6419 B) 5352 C) 7263
D) 1948 E) 3527

$\Rightarrow \text{VEDA} = ?$

3. SANSAR
HASRET
HASSAS
MANTAR
HANTAL

- A) 476471 B) 376579 C) 276571
D) 374185 E) 374474

$\Rightarrow \text{HASRET} = ?$

4. KİŞA
ASAT
KILI
RAKA
ULUS

- A) 0743 B) 3536 C) 0717
D) 9303 E) 8185

5. KATI \Rightarrow 4381
EREN \Rightarrow 2527
EMEL \Rightarrow 2920
MERAK \Rightarrow ?

- A) 34724 B) 92584 C) 92357
D) 92534 E) 95204

6.

8	2	1
2	1	8
1	8	2

$\Rightarrow ?$

- A) BAC B) CBA C) ACB D) BCC E) ACB
CBC BAC CBA ACA ABA
ACB BCA BAC BCA CAB

7. ELİÇ
ŞİNİ
İÇEK
İÇLE
ELİŞ } \Rightarrow İÇLE = ?

- A) 4580 B) 4507 C) 0843

D) 0845 E) 3494

8. NİNES
NİLEG
ZİNED
NİGDE
ZİMET } \Rightarrow NİLEG = ?

- A) 84856 B) 24853 C) 24051

D) 84735 E) 84957

9. KALAS
KELES
KAYAK
KANYO
KALAM } \Rightarrow KALAS = ?

- A) 45178 B) 45359 C) 45754

D) 45352 E) 46362

10. KAPAK
KUMAP
KALGO
PAKAL
KALAY } \Rightarrow KALAY = ?

- A) 90206 B) 40902 C) 95804

D) 90409 E) 90231

11. AFAY
İÇİF
UYUK
IVIS
IYIK } \Rightarrow IVIS = ?

- A) 8984 B) 2721 C) 5153

D) 8183 E) 8687

12. İKTAH
AFTOS
TUHAF
HAFİF
FAHİK } \Rightarrow FAHİK = ?

- A) 39124 B) 24591 C) 19323

D) 57193 E) 93568

METROPOL YAYINLARI • METROPOL PUBLICATIONS

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	C	D	E	D	C	A	E	D	A	A	A

1.

5	4	7	5
1	7	5	8
1	8	5	7

$\Rightarrow ?$

A) $\begin{array}{r} \rightarrow = - \rightarrow \\ \leftarrow = - \rightarrow \\ - + - = \end{array}$

B) $\begin{array}{r} \circ - \triangle + \\ \triangle + \rightarrow \leftarrow \\ - \rightarrow - \rightarrow \end{array}$

C) $\begin{array}{r} \circ \triangle + \circ \\ - + \circ \rightarrow \\ - \leftarrow \circ + \end{array}$

D) $\begin{array}{r} \triangle \triangledown + \triangle \\ - + \triangle \rightarrow \\ - \rightarrow \triangle + \end{array}$

E) $\begin{array}{r} \triangle \circ - \triangle \\ + - \triangle \rightarrow \\ - \rightarrow \triangle + \end{array}$

2.

$\wedge \blacksquare \blacktriangle \wedge$	$\vee \blacksquare \blacktriangleright \vee$
$\cap \triangle \blacktriangleright \cap$	$\bullet \triangle \blacktriangle \bullet$
$\circ \oplus \bullet \circ$	

$\Rightarrow \vee \blacksquare \blacktriangleright \vee = ?$

A) 4394

B) 5025

C) 7327

D) 8098

E) 6186

3.

$\square \neq \square \circ$	$\triangle + \circ \triangle$
$\triangle \square \neq \square$	$\triangle \square \neq \square$
$\triangle \cap \circ + \circ$	$\triangle \neq \square \circ$

$\Rightarrow \triangle \square \neq \square = ?$

A) 1838

B) 6252

C) 6386

D) 2528

E) 6528

4.

$\triangle \circ \square \triangle$	$\circ \triangle \circ \square$
$\square \triangle \circ \triangle$	$\triangle \circ \triangle \square$
$\circ \square \square \triangle$	

$\Rightarrow \circ \triangle \circ \square = ?$

A) 2141

B) 4221

C) 4142

D) 1421

E) 1412

5.

$\blacksquare \triangle \bullet \blacksquare$	$\circ \triangle \square \blacksquare$
$\diamond \triangle \bullet \bullet$	

$\Rightarrow ?$

A) CENK
CÖNK
DENK

B) FARK
ODAK
TALK

C) ÇARK
TALK
FARK

D) DANK
FARK
ÇARK

E) KALK
OCAK
TALK

6.

ETEK	KORU
ÇETE	SAKA
AKAR	

$\Rightarrow \text{KORU} = ?$

A) $\triangle \wedge \blacktriangle \wedge$

B) $\blacksquare + \circ :$

C) $\wedge \blacktriangle \wedge \blacksquare$

D) $\vee \neq \blacksquare \neq$

E) $\neq \blacksquare \neq \circ$

7. **YAPI**
KIYI
KAZI
YAZI
SARI

- $\Rightarrow \text{KAZI} = ?$
- A) $\blacktriangle \triangle + \bullet$ B) $\square \triangle \circ \bullet$ C) $\blacksquare \triangle + \bullet$
 D) $\blacksquare \bullet \blacktriangle \bullet$ E) $\blacktriangle \triangle : \bullet$

8. **KERE**
KARA
ARSA
SARA
FARE

- $\Rightarrow \text{ARSA} = ?$
- A) $\triangle \times \square \triangle$ B) $\circ \vee \times \vee$ C) $+ \triangle \times \vee$
 D) $\square \triangle \times \triangle$ E) $\circ \triangle \times \triangle$

9. **ÇIKA**
AKÇA
ÇAKI
UÇAK
AÇIK

- $\Rightarrow \text{AÇIK} = ?$
- A) $\square \downarrow \uparrow \triangle$ B) $\triangle \uparrow \square \triangle$ C) $\square \triangle \uparrow \downarrow$
 D) $\triangle \square \downarrow \uparrow$ E) $\leftrightarrow \square \triangle \uparrow$

10. **ALP**
AND
NAL
CAN
PAN

- $\Rightarrow \text{NAL} = ?$
- A) $\star \uparrow \triangle$ B) $\uparrow \circ \star$ C) $\downarrow \uparrow \triangle$
 D) $\triangle \uparrow \circ$ E) $\uparrow \triangle \square$

11. **82394**
52364
12314
12394
74364

- $\Rightarrow 52364 = ?$
- A) KORKU B) BURGU C) SORGU
 D) ZORLU E) KORLU

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12. **MESİR**
TESİR
SEFİR
KESİR
TEKİR

- $\Rightarrow \text{TESİR} = ?$
- A) 37612 B) 47612 C) 57612
 D) 37412 E) 67812

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	C	E	B	C	A	D	D	C	A

1. $\begin{array}{l} 127943 \\ 521503 \\ 123452 \\ 212582 \\ 236272 \end{array} \Rightarrow 236272 = ?$

A) AMASYA B) MARDİN C) MANİSA
D) SAMSUN E) ANKARA

2. $\begin{array}{l} 34641 \\ 12746 \\ 34346 \\ 12345 \\ 14325 \end{array} \Rightarrow 14325 = ?$

A) TARAK B) KATİP C) KİTAP
D) KİBAR E) TATAR

3. $\begin{array}{l} KABA \\ SOPA \\ KUPA \\ SAPA \\ POTA \end{array} \Rightarrow KUPA = ?$

A) 1474 B) 5634 C) 1234
D) 5434 E) 3684

4. $\begin{array}{l} KUCAK \\ SOKAK \\ KAPAK \\ KAÇAK \\ SAÇAK \end{array} \Rightarrow KAPAK = ?$

A) 42321 B) 47121 C) 12821
D) 12321 E) 15621

5. $\begin{array}{l} SAKLAMA \\ BEKLEME \\ BEREKET \\ KERAMET \\ BELLEME \end{array} \Rightarrow KERAMET = ?$

A) 0177161 B) 8537565 C) 3125614
D) 0121314 E) 0137161

6. $\begin{array}{l} HOP \\ MOD \\ TOP \\ KOP \\ TOK \end{array} \Rightarrow TOK = ?$

A) 526 B) 423 C) 723
D) 123 E) 124

7. $\left. \begin{array}{l} 14894 \\ 30809 \\ 10203 \\ 34567 \\ 76943 \end{array} \right\} \Rightarrow 30809 = ?$

- A) BAŞRA
B) KÜFÜR
C) BÜYÜK
D) MERAK
E) KALEM

8. $\left. \begin{array}{l} 523 \\ 423 \\ 425 \\ 123 \\ 325 \end{array} \right\} \Rightarrow 425 = ?$

- A) SAL
B) LAM
C) BAL
D) MAL
E) SAM

9. $\left. \begin{array}{l} 70 \\ 50 \\ 09 \\ 30 \\ 07 \end{array} \right\} \Rightarrow 07 = ?$

- A) FA
B) MA
C) SA
D) AF
E) AL

10. $\left. \begin{array}{l} ÜSSÜ \\ KÜME \\ ESİR \\ TREN \\ MERT \end{array} \right\} \Rightarrow KÜME = ?$

- A) 2156
B) 4774
C) 9512
D) 5731
E) 8495

11. $\left. \begin{array}{l} 32434 \\ 26834 \\ 86243 \\ 23830 \\ 53071 \end{array} \right\} \Rightarrow 23830 = ?$

- A) HESAP
B) HASAR
C) BARIŞ
D) SEHPA
E) AHPAP

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12. $\left. \begin{array}{l} MARKİZ \\ DERZİM \\ MARDİN \\ KANKAN \\ NERMİN \end{array} \right\} \Rightarrow MARKİZ = ?$

- A) 403951
B) 123456
C) 603156
D) 123759
E) 726726

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
E	B	C	C	C	E	B	E	D	E	B	D

I.	II.
E L E K	□ ■ □ ○
K E D İ	★ △ ★ △
I L İ K	△ ■ △ ○
D E D E	■ △ ○ △
L E K E	○ △ ★ □
⇒ EKİLDİ = ?	

- A) △ ○ □ ■ ★ □
 B) △ ■ ○ ★ □ ○
 C) ★ □ ○ ■ □ ○
 D) ■ ○ △ ★ △ ○
 E) ○ △ ■ □ ■ ★

□ ★ □	⇒ ?
★ □ ○	
○ ★ □	
A) 132	B) 313
221	233
231	121
D) 321	E) 221
132	132
231	313

I.	II.
R E N K	1 2 3 6
K A R K	2 5 1 8
K A R T	6 2 5 6
T A N K	5 4 3 6
A R T I	6 2 5 1
⇒ KENAR = ?	

- A) 64325 B) 62435 C) 36215
 D) 31256 E) 13258

I.	II.
A S K I M	1 5 3 2 4
K A S I M	4 1 3 1 5
K A S K I	3 1 5 3 2
S U M A K	5 9 4 1 3
M A K A S	3 1 5 2 4
⇒ MUSKA = ?	

- A) 41526 B) 14325 C) 49531
 D) 39215 E) 13524

5. JÖLE	MİLE	KASA	KALE	MANA
A) 9542	B) 1342	C) 6707		
D) 6742	E) 1787			

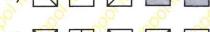
5. JÖLE	MİLE	KASA	KALE	MANA
A) 9542	B) 1342	C) 6707		
D) 6742	E) 1787			

6. HARE	HANE	PAYE	KARE	VADE
A) □ □ □ □	B) □ □ □ □	C) □ □ □ □	D) □ □ □ □	E) □ □ □ □

- A) □ □ □ □
 B) □ □ □ □
 C) □ □ □ □
 D) □ □ □ □
 E) □ □ □ □

7. BARIŞ
GELİŞ
DİDİN
KONUŞ
ŞAŞIR

⇒ KONUS = ?

- A) 
 B) 
 C) 
 D) 
 E) 

8. ÇALIŞ = BÜĞCJ

⇒ BAŞAR = ?

- A) KULMIN B) SMNMV C) ZÜNSİ
 D) YÜJÜİ E) YUMUN

9.

I.	II.
K E L E B	1 4 7 4 2
K E L B E	8 4 7 4 5
S E L E Z	8 4 7 4 9
K E L E M	8 4 7 5 4
S E L E D	1 4 7 4 3

⇒ KELEBEK = ?

- A) 1474241 B) 8474548 C) 8474948
 D) 1475484 E) 5474845

10. AZMİ
SİNÉ
ASİN
İVİK
ANAV

⇒ ANAV = ?

- A) 9197 B) 5251
 C) 5692 D) 5389 E) 6924

11. ADAMAK

OLUMLU
OKULLU
ILIMLI
DOLUNC

⇒ OLUMLU = ?

- A) 987687 B) 282682 C) 343631
 D) 498753 E) 917887

12. GİRNE

ENGİN
FİYAT
YATIR
YENGE

⇒ FİYAT = ?

- A) 21078 B) 93210 C) 45635
 D) 24564 E) 63854

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	A	C	D	E	A	D	B	B	A	B

1. YAVAN
KAVGA
YATAK
HAYAT
KANAT

A) 97178 B) 37879 C) 97457
D) 37471 E) 27378

2. AZİM
RAMİ
ELMA
İNCE
EMİR

A) 8429 B) 7658 C) 3927
D) 8273 E) 9172

3. KENE
MALİ
EKİN
LİMA
İNEK

A) 4627 B) 5413 C) 7262
D) 2746 E) 1354

4. TAKA
ŞATO
ŞAKA
CAKA
ATES

A) 1234 B) 2161 C) 4161
D) 4125 E) 7161

5. ERER
ARTI
ATAR
ATKİ
EKER

A) 9357 B) 9237 C) 6262
D) 9392 E) 6562

6. TAAM
MİRA
İTEK
KERT
EMMI

A) 3224 B) 5376 C) 6002
D) 2470 E) 4635

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7. AKA
ELİ
İLK
İLE
ALİ } \Rightarrow ALİ = ?

- A) 684 B) 685 C) 757
D) 786 E) 486

8. YALI
YARI
KATI
YARA
KALE } \Rightarrow YALI = ?

- A) 4987 B) 5986 C) 5937
D) 4929 E) 4927

9. KEL
İYİ
YEL
KAL
İKİ } \Rightarrow KEL = ?

- A) 757 B) 468 C) 598
D) 747 E) 568

10. KARA
MASA
MALA
SILA
KALE } \Rightarrow MASA = ?

- A) 7953 B) 2313 C) 4353
D) 4373 E) 2356

11. SARIM
MISRA
SELAM
MERAM
RASİM } \Rightarrow SELAM = ?

- A) 12385 B) 36725 C) 54312
D) 56125 E) 32145

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12. 468567
675686
567468 } \Rightarrow 567468 = ?
123124
968407

- A) ANKARA B) MEHMET C) TARKAN
D) BARTIN E) KANTAR


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	B	D	C	B	B	D	A	E	D	B	E

BÖLÜM 02

CHAPTER

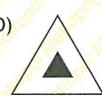
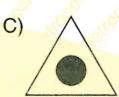
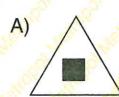
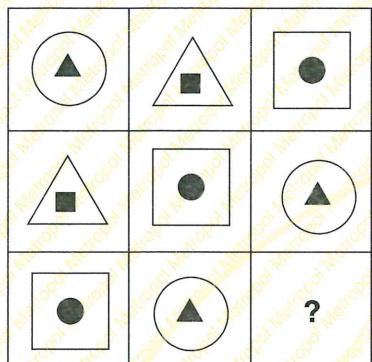
ŞEKİL BAĞINTILARI FIGURE RELATIONS

Bölüm / Chapter 2

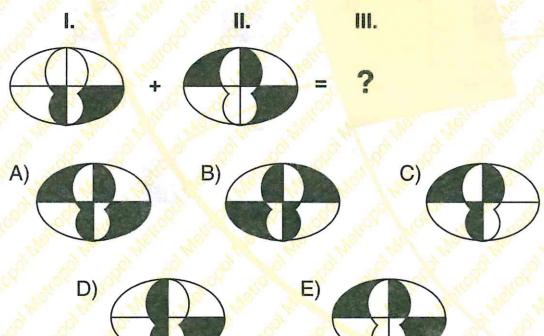
Şekil Bağıntıları / Figure Relations

Test 1

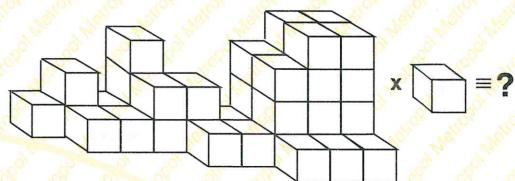
1.



2.



3.



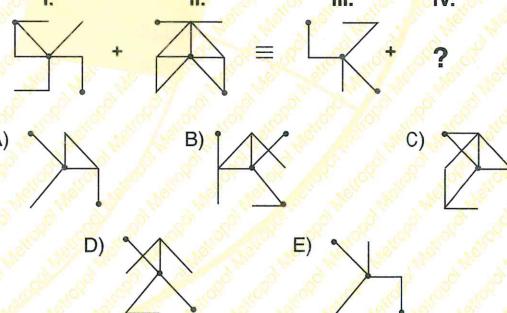
Yukarıdaki şenlide kaç tane küp vardır?

How many cubes are in the figure above?

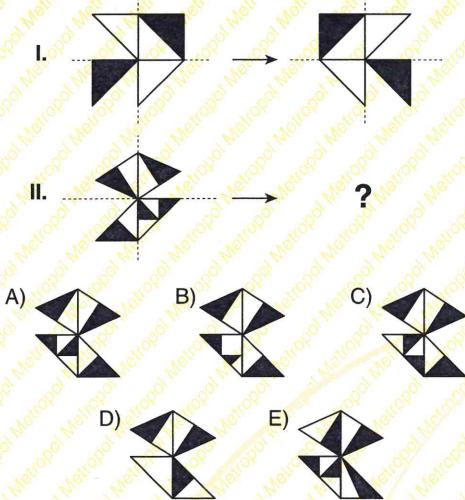
- A) 40
- B) 41
- C) 42
- D) 43
- E) 44

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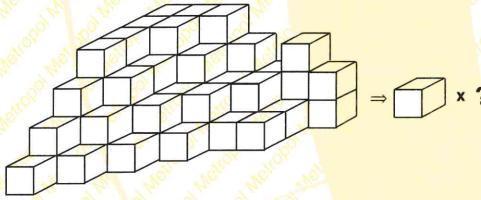
4.



5.



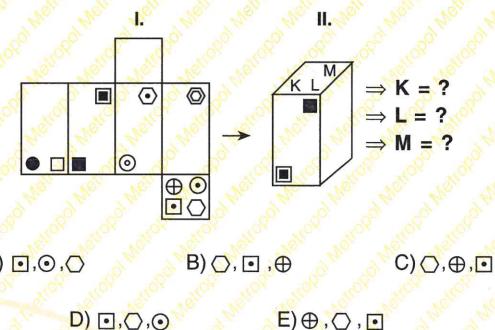
6.

**Yukarıdaki şekilde kaç tane küp vardır?**

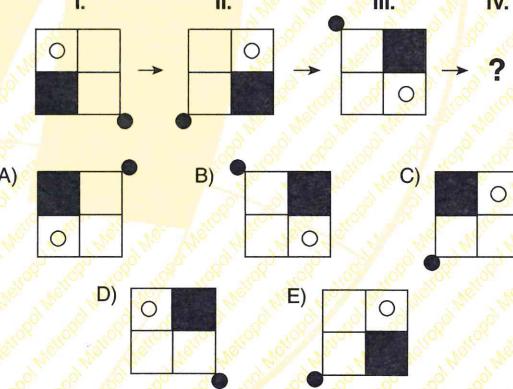
How many cubes are in the figure above?

- A) 69
B) 70
C) 71
D) 72
E) 73

7.



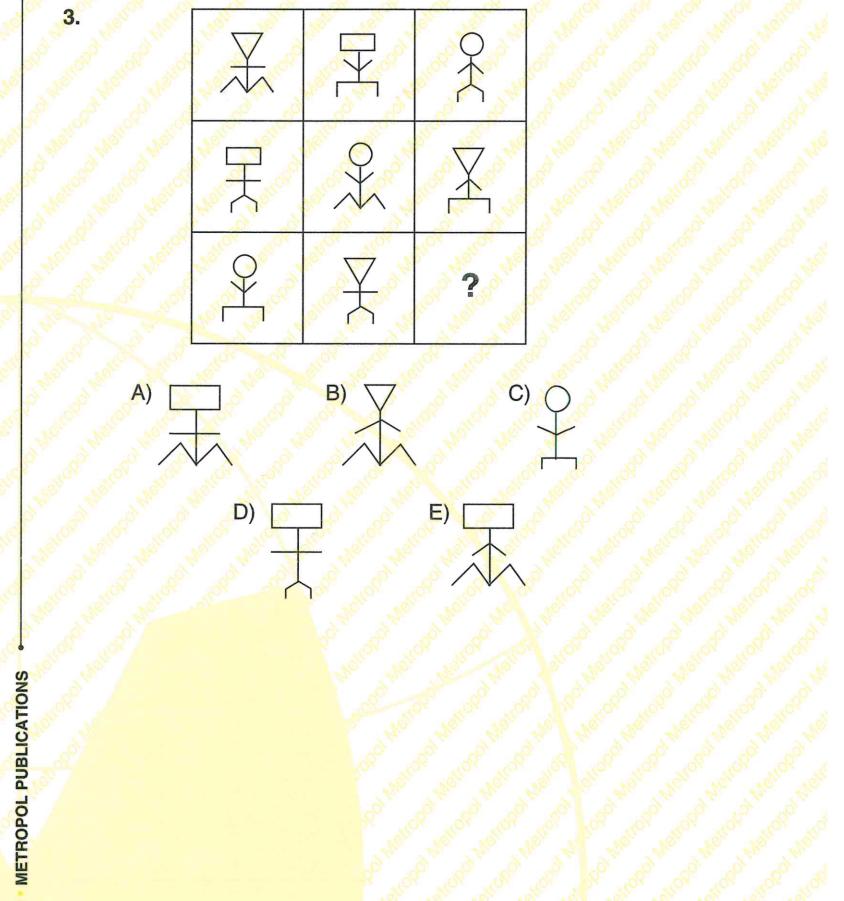
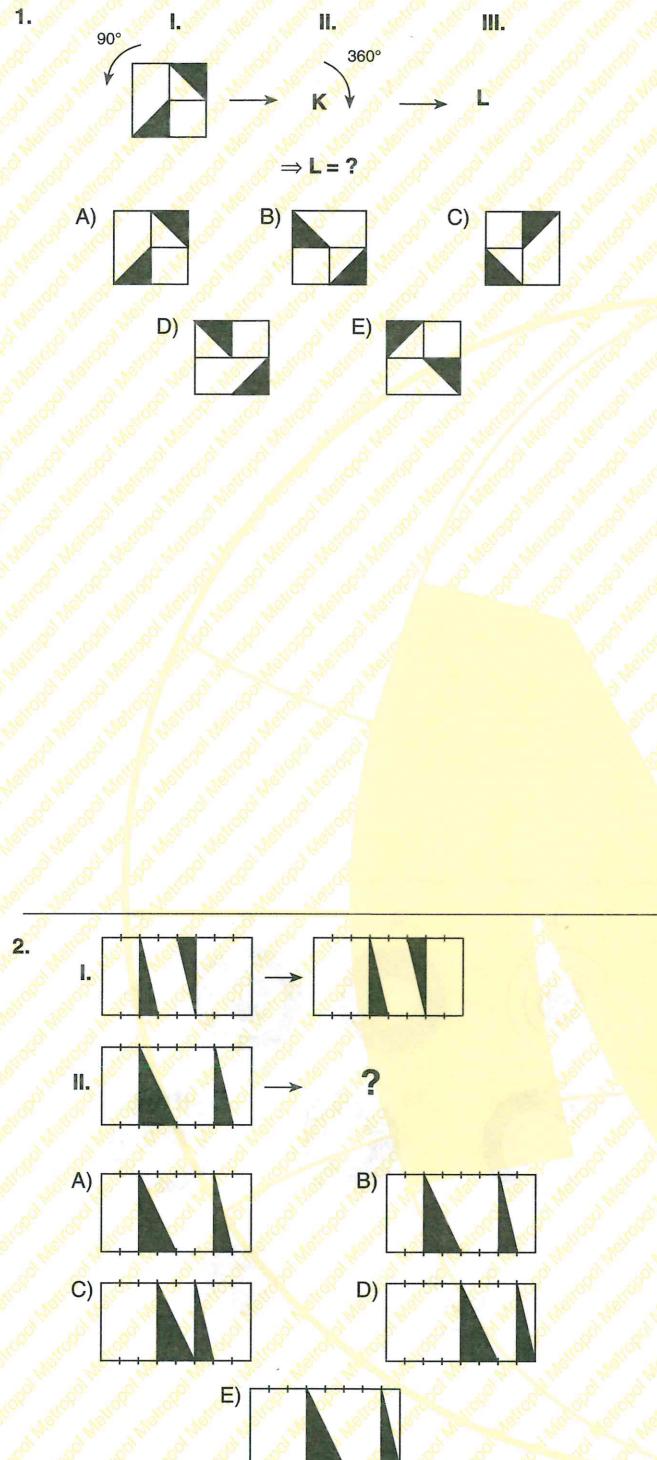
8.

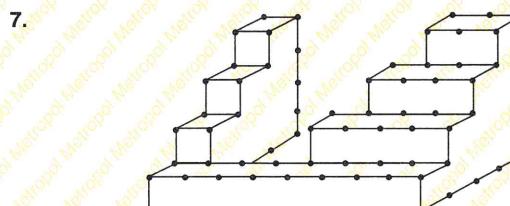
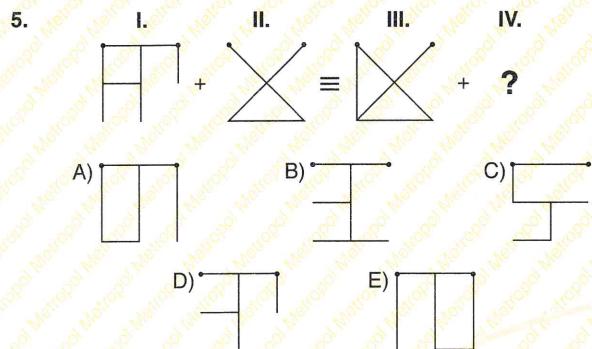


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**YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8
A	A	B	C	A	C	D	A





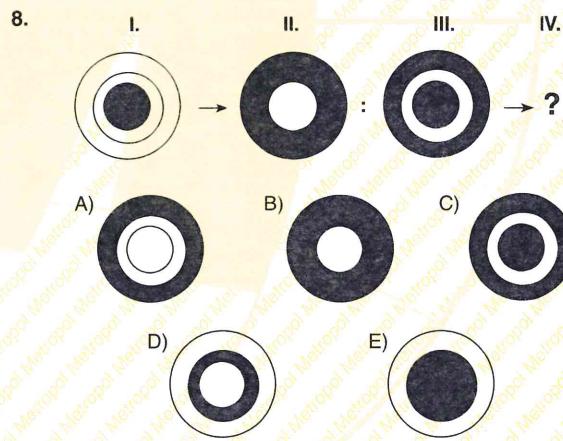
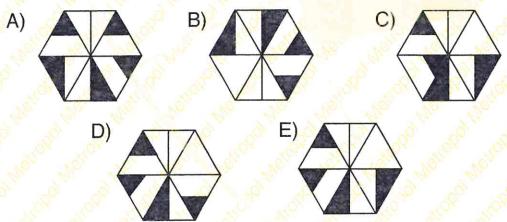
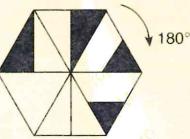
Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

- A) 38
 B) 39
 C) 40
 D) 41
 E) 42

6. Yandaki şekil 180° döndürülüğünde aşağıdaki şekillerden hangisi oluşur?

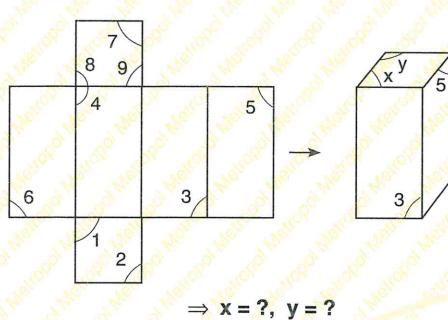
When the figure above rotates 180° , which of the following figure is formed?



YANITLAR / ANSWERS

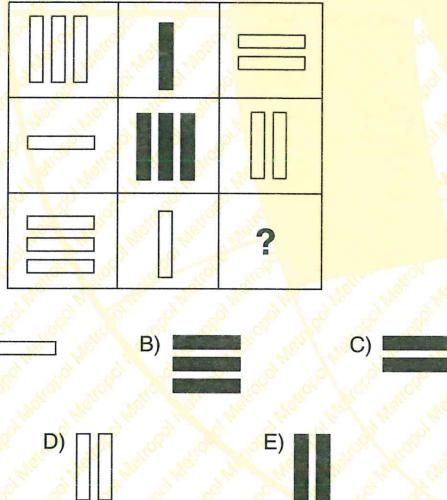
1	2	3	4	5	6	7	8
E	E	E	D	D	E	E	D

1.



- A) 9, 8
B) 8, 7
C) 7, 9
D) 9, 7
E) 8, 9

2.



ŞEKİL BAĞINTILARI / FIGURE RELATIONS

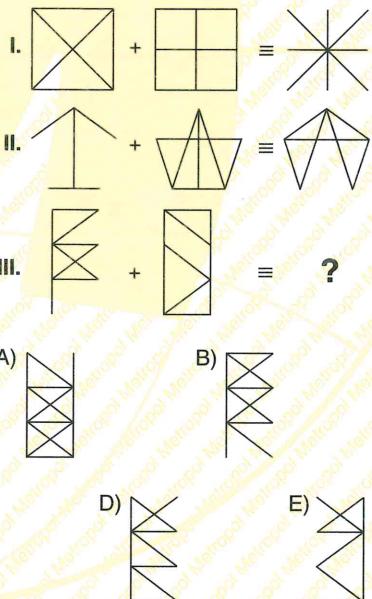
3.

		?

- A) B) C)
D) E)

METROPOL YAYINLARI / METROPOL PUBLICATIONS

4.



- A) B) C)
D) E)

- $$5. \quad \boxed{X \ Y}, \boxed{a \ b}, \boxed{c \ d}, \boxed{e \ f} \rightarrow \boxed{Y \ a \ d \ e}$$



8

- A) 

B) 

C) 

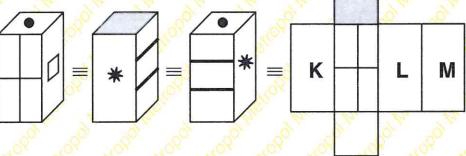
D) 

E) 

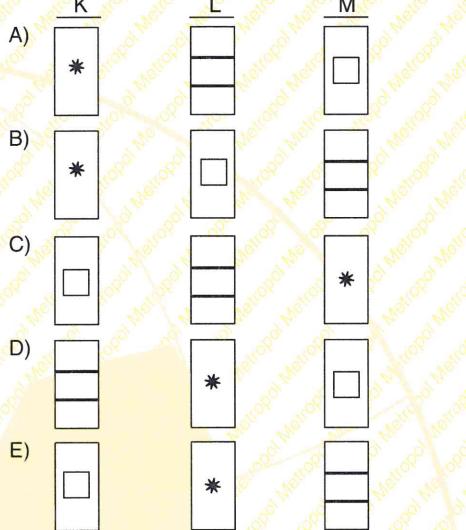
- A 3D staircase is constructed from a grid of cubes. The staircase has 4 steps going up and 3 steps going right. It starts at the bottom-left and ends at the top-right. The total number of cubes used is 24.

- A) 79
 - B) 80
 - C) 81
 - D) 82
 - E) 83

7.



$\Rightarrow K = ? ; L = ? ; M = ?$



MEIRUPÜL YAYINLARI • MEIRUPÜL PUBLICATIONS

8.

- I.**

II.

A)

B)

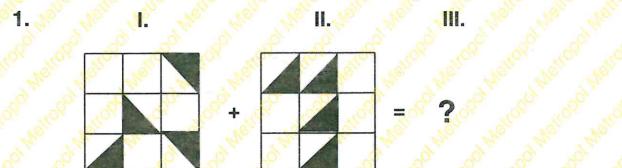
C)

D)

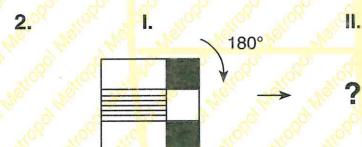
E)



1	2	3	4	5	6	7	8
A	E	A	C	E	C	E	C



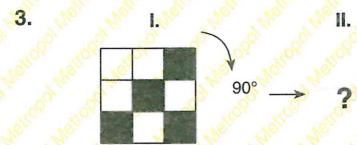
- A) B) C)
- D) E)



Yukarıdaki şekil 180° döndürüldüğünde aşağıdaki şekillerden hangisi oluşur?

When the figure above rotates 180°, which of the followings figure is formed?

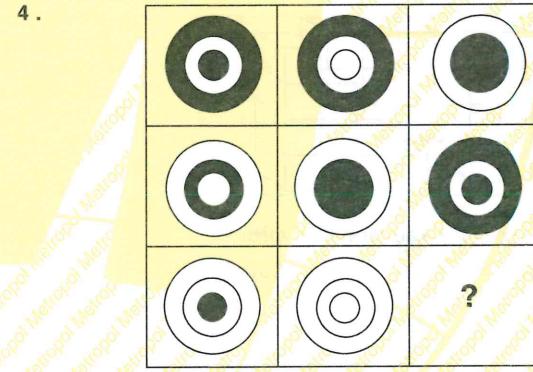
- A) B) C)
- D) E)



Yukarıdaki şekil 90° döndürüldüğünde aşağıdaki şekillerden hangisi oluşur?

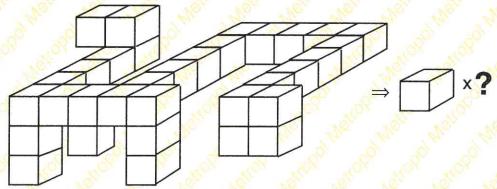
When the figure above rotates 90°, which of the followings figure is formed?

- A) B) C)
- D) E)



- A) B) C)
- D) E)

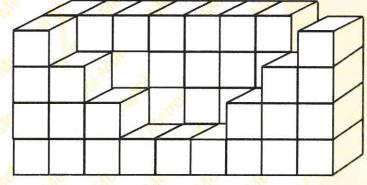
5.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

- A) 33
B) 34
C) 35
D) 36
E) 37

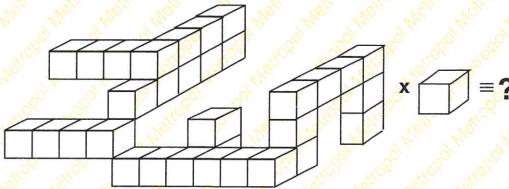
6.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

- A) 46
B) 47
C) 48
D) 49
E) 50

7.

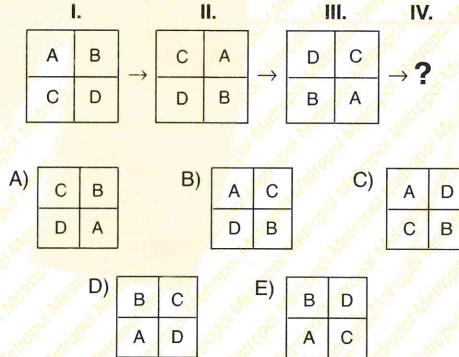
**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

- A) 31
B) 32
C) 33
D) 34
E) 35

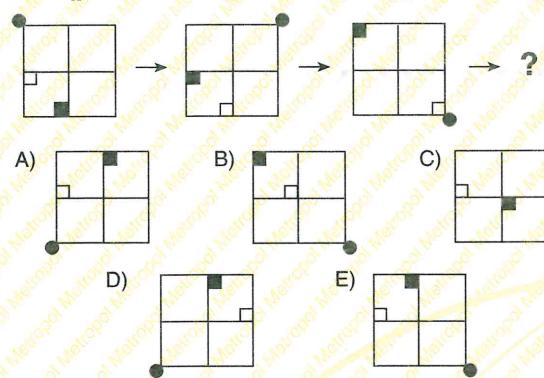
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8.

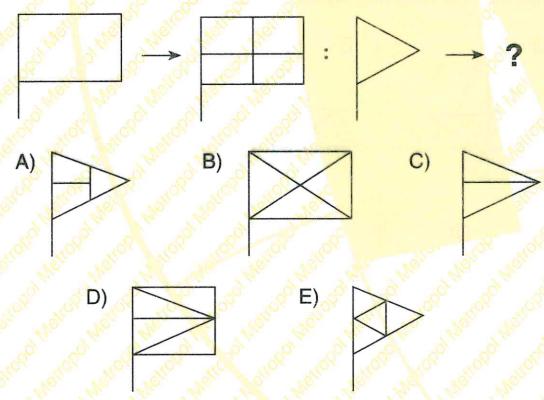
**YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8
B	C	D	A	A	D	B	E

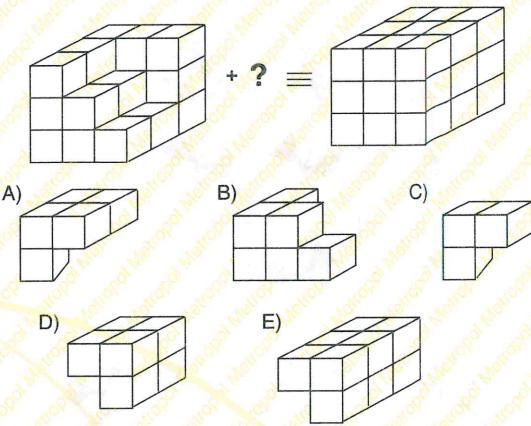
1.



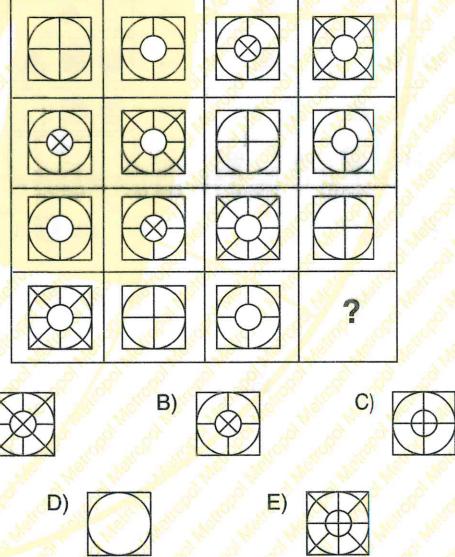
2.



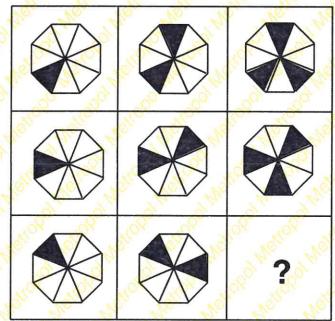
3.



4.

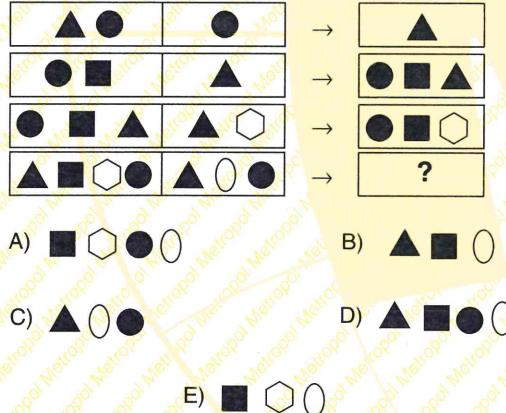


5.

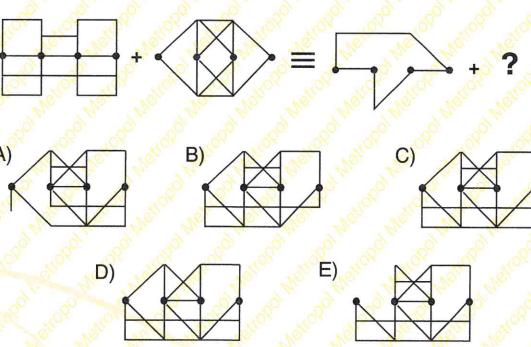


- A)
- B)
- C)
- D)
- E)

6.



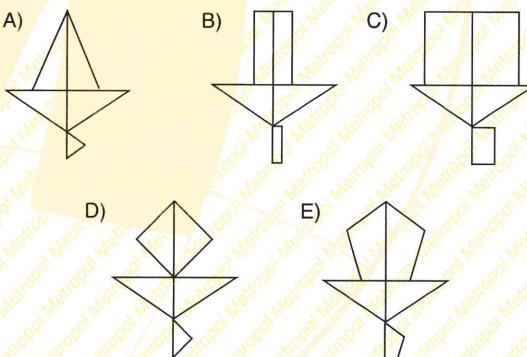
7.



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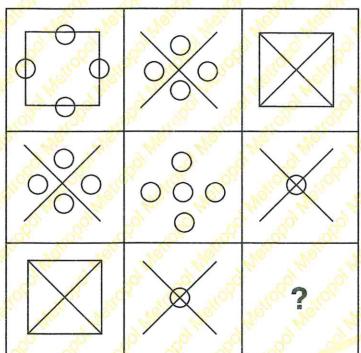
8. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?



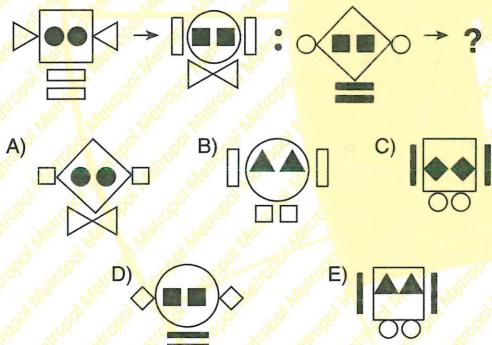
1	2	3	4	5	6	7	8
D	E	D	B	A	E	C	A

1.



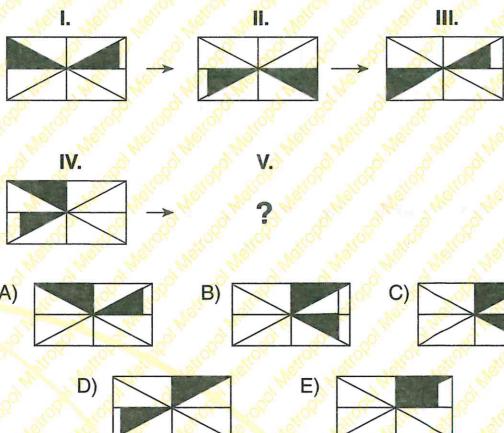
- A)
- B)
- C)
- D)
- E)

2.



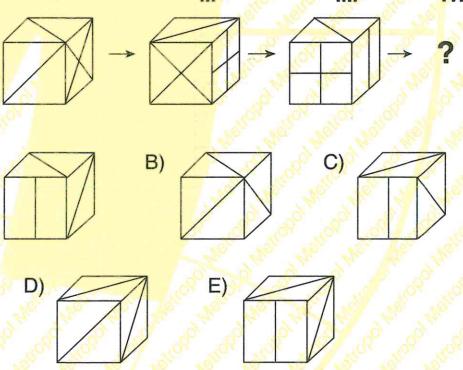
- A)
- B)
- C)
- D)
- E)

3.



- A)
- B)
- C)
- D)
- E)

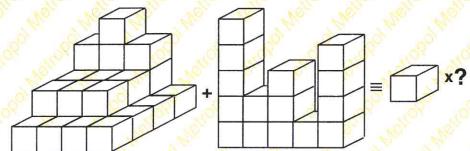
4.



- A)
- B)
- C)
- D)
- E)

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5.

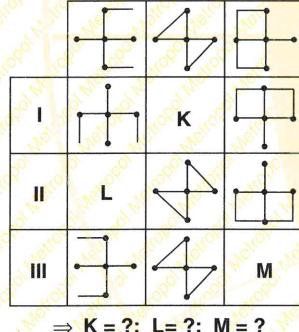


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

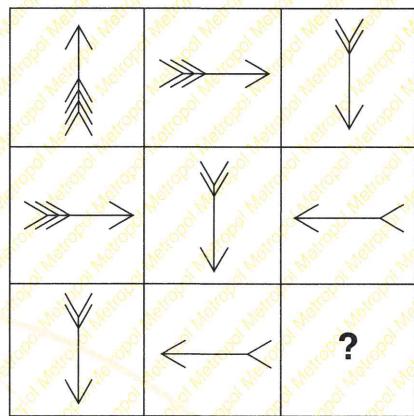
- A) 44
- B) 45
- C) 46
- D) 47
- E) 48

6.



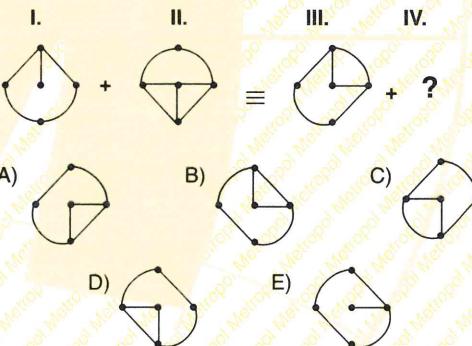
- | K | L | M |
|----|---|---|
| A) | | |
| B) | | |
| C) | | |
| D) | | |
| E) | | |

7.



- A)
- B)
- C)
- D)
- E)

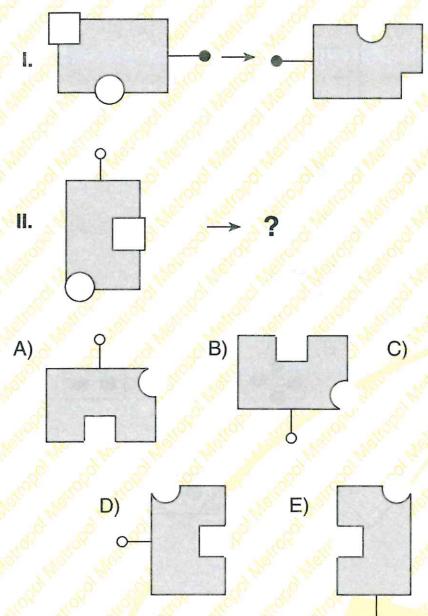
8.



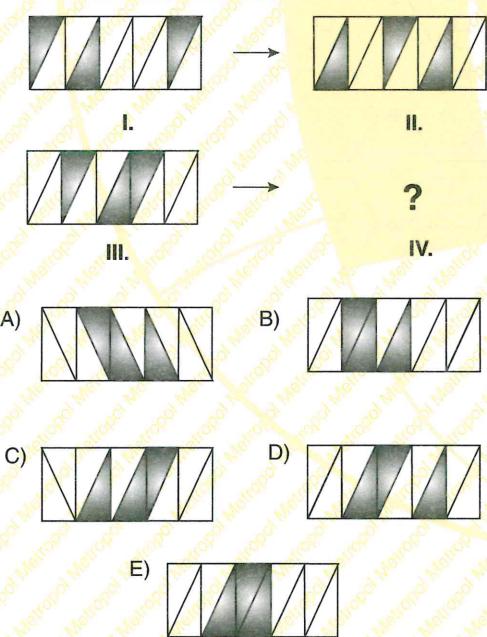
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	C	E	E	A	A	C	D

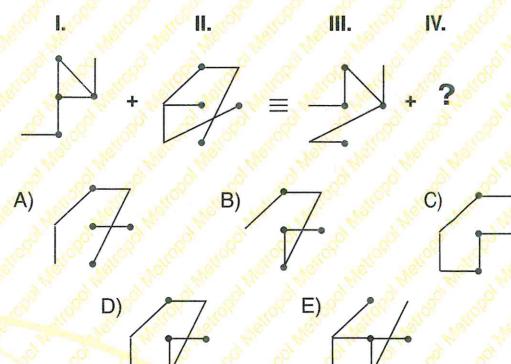
1.



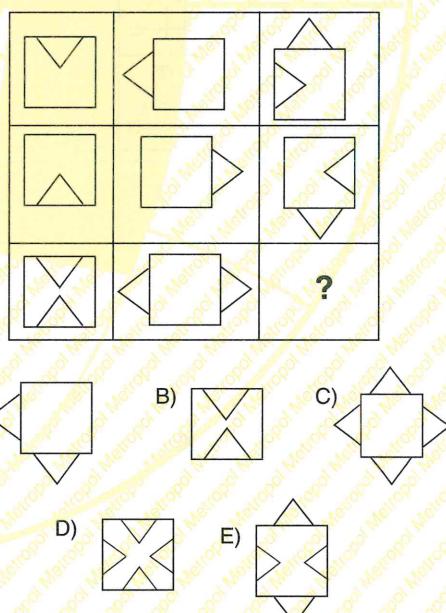
2.



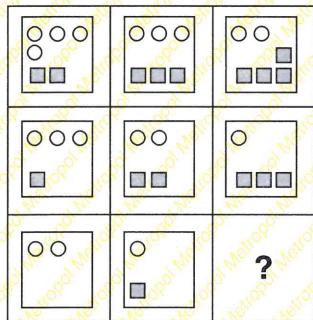
3.



4.

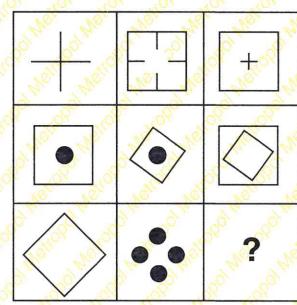


5.



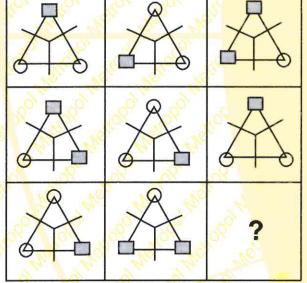
- A)
- B)
- C)
- D)
- E)

7.



- A)
- B)
- C)
- D)
- E)

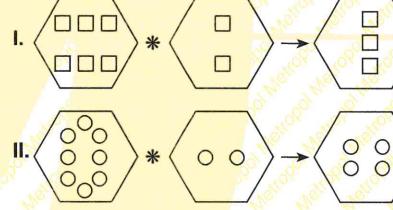
6.



- A)
- B)
- C)
- D)
- E)

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8.

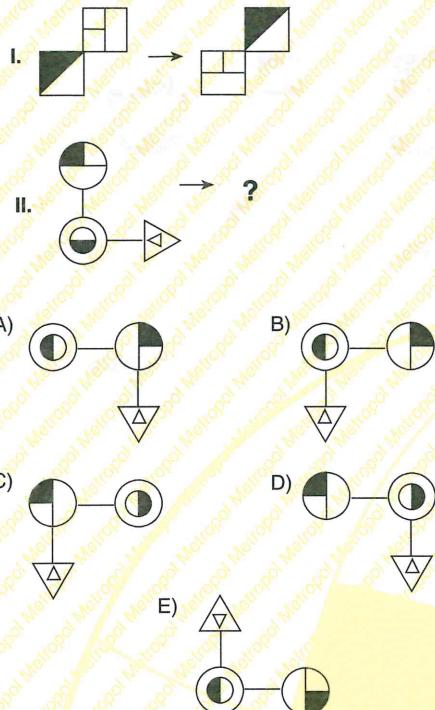


- A)
- B)
- C)
- D)
- E)

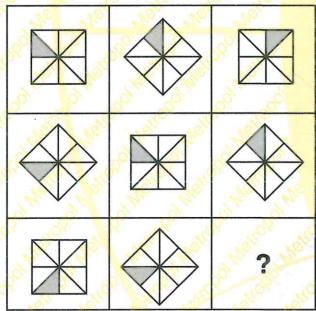
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	C	D	E	D	E	B	D

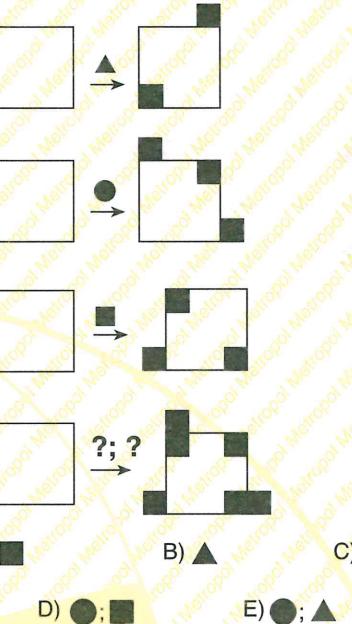
1.



2.

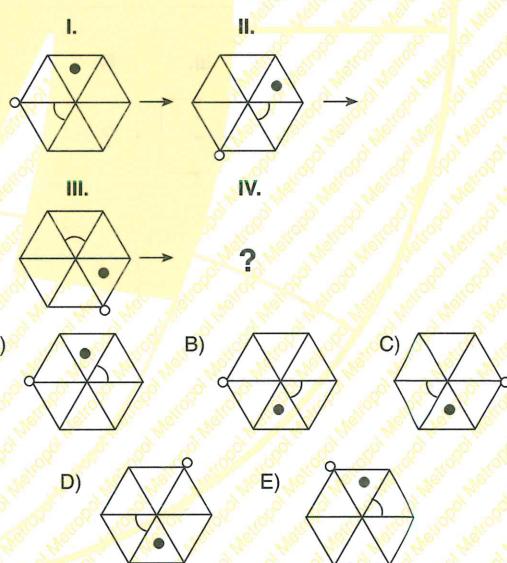


3.

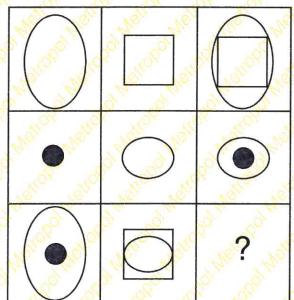


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4.

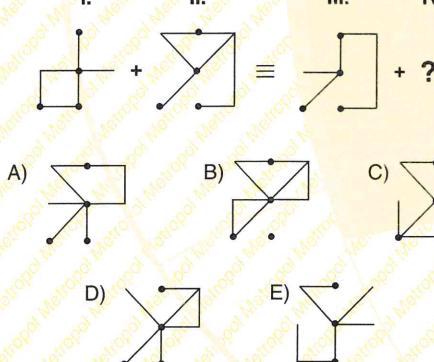


5.

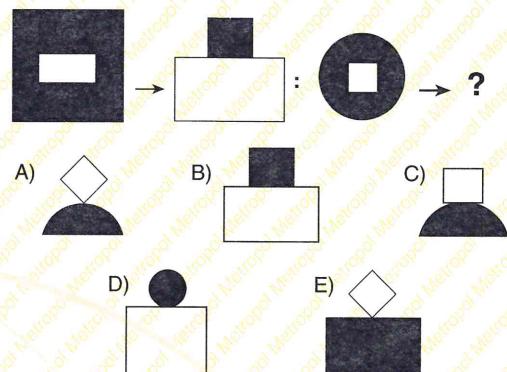


- A)
- B)
- C)
- D)
- E)

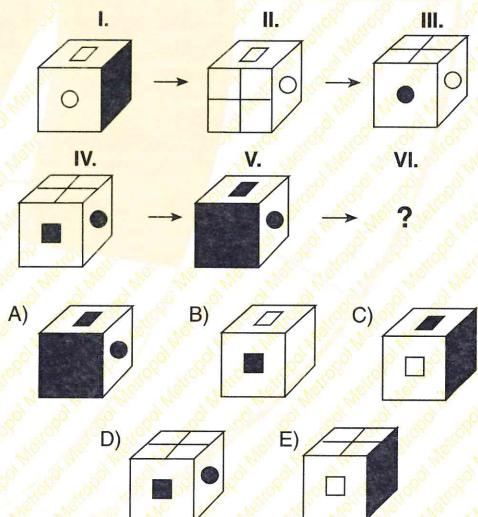
6.



7.



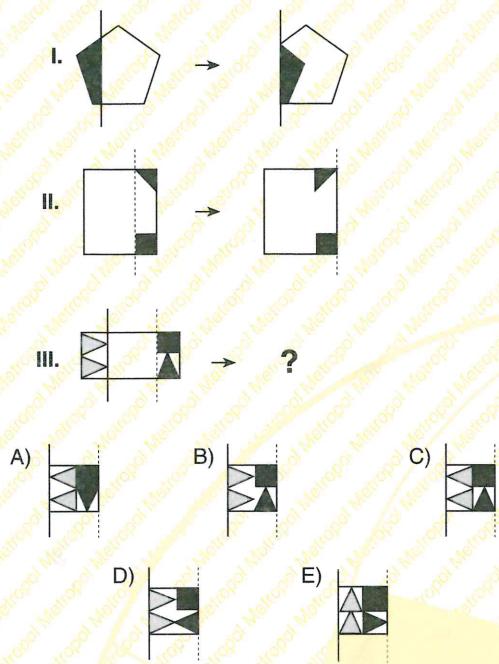
8.



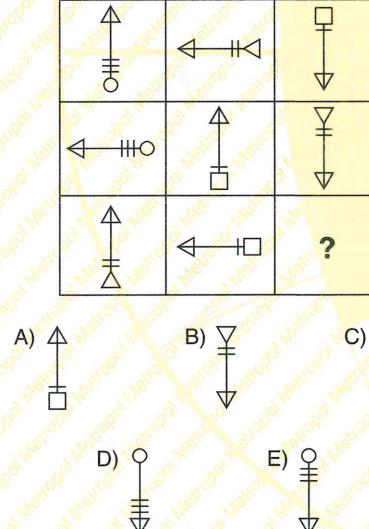
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
D	D	D	C	C	E	D	C

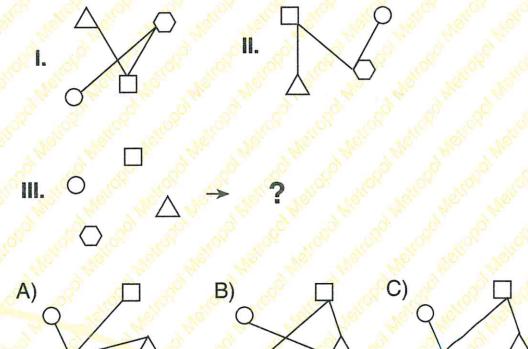
1.



2.

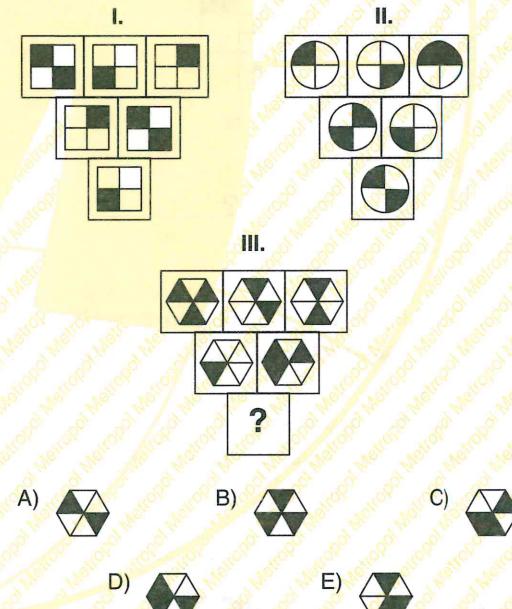


3.

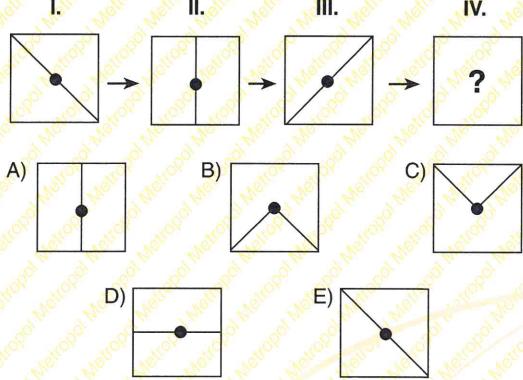


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4.

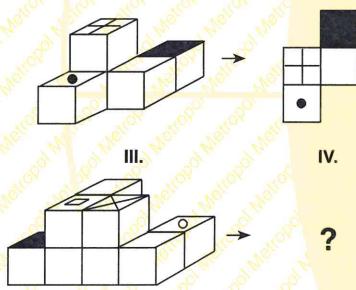


5.



- A) B) C) D) E)

6.

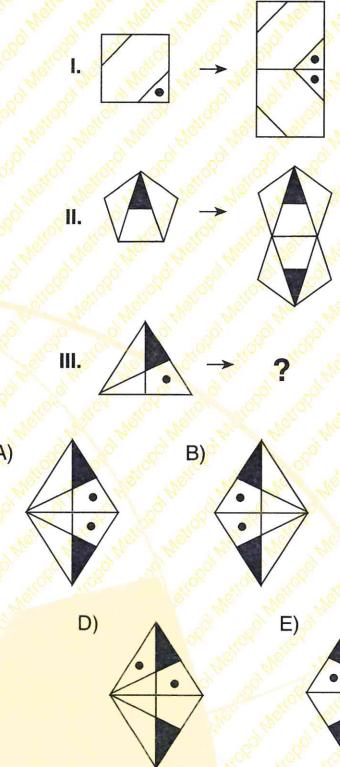


I. şekildeki küplerin üstten görünüşü II. şekildeki gibidir. Buna göre, III. şekildeki küplerin üstten görünüşü aşağıdakilerden hangisidir?

The cubes in figure I are seen from above as in figure II. Which of the following shows the appearance of the cubes in figure III when viewed from above?

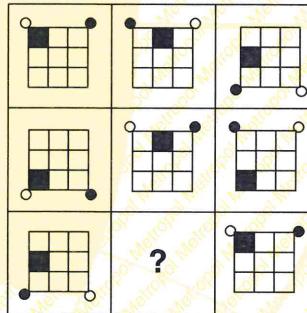
- A) B) C) D) E)

7.



- A) B) C) D) E)

8.

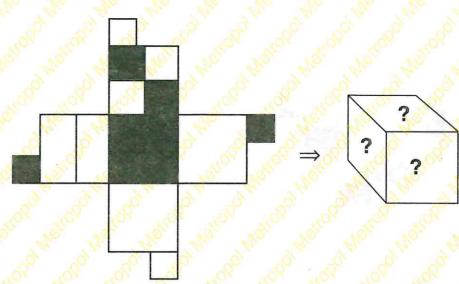


- A) B) C) D) E)

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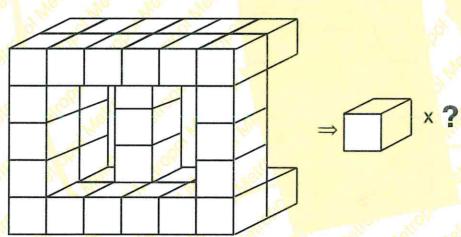
1	2	3	4	5	6	7	8
C	E	C	E	C	E	A	E

1.



- A)
- B)
- C)
- D)
- E)

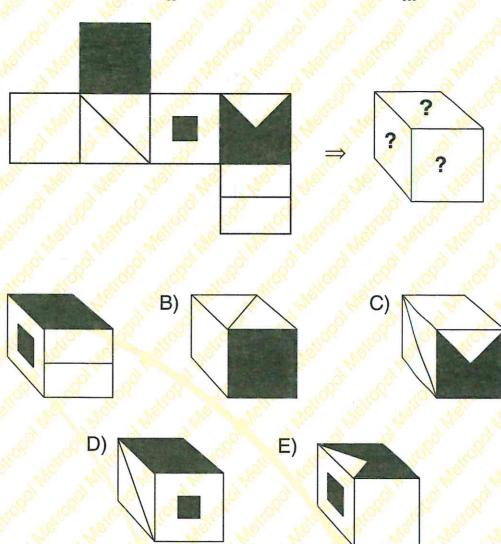
2.



- A) 33 B) 34 C) 35
D) 36 E) 37

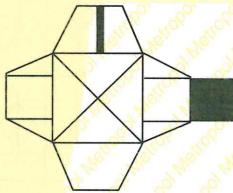
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3.



- A)
- B)
- C)
- D)
- E)

4.

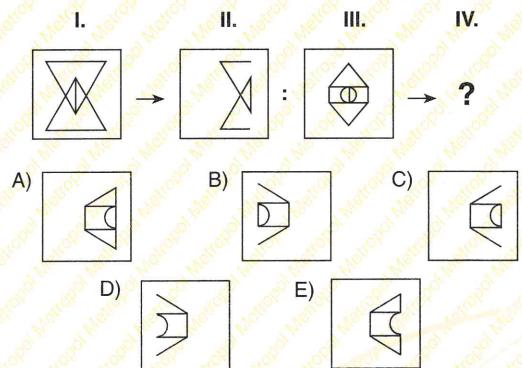


Aşağıdakilerden hangisi yukarıdaki şekeiten kapalı halidir?

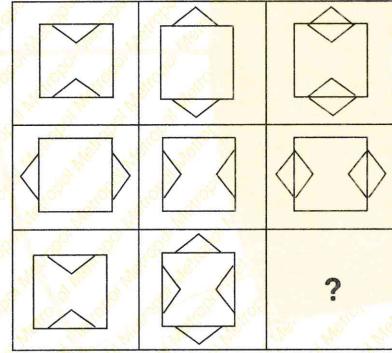
Which of the following is closed form of the figure above?

- A)
- B)
- C)
- D)
- E)

5.

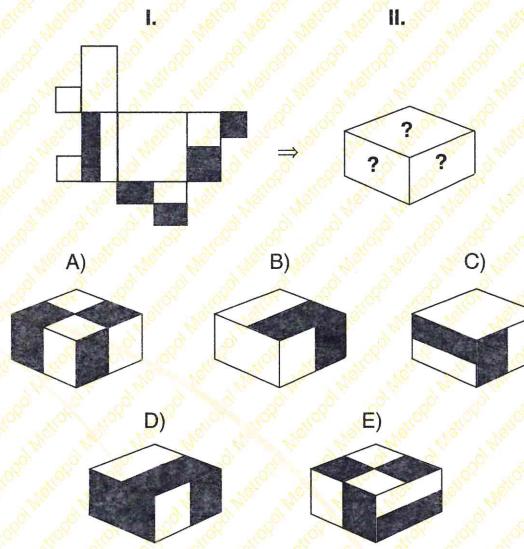


6.



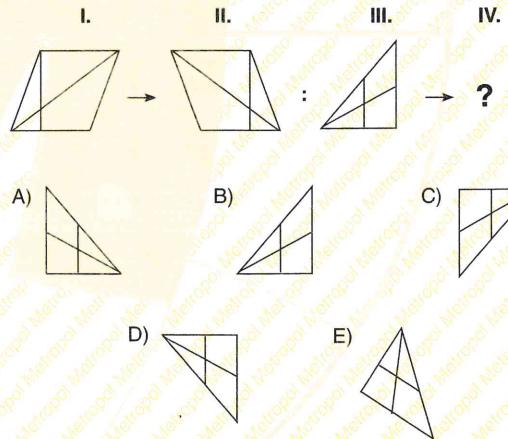
- A)
- B)
- C)
- D)
- E)

7.

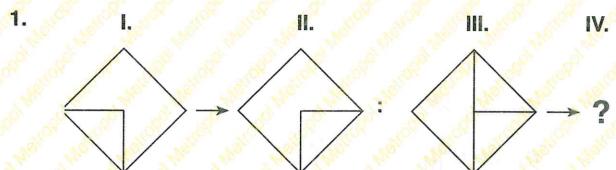


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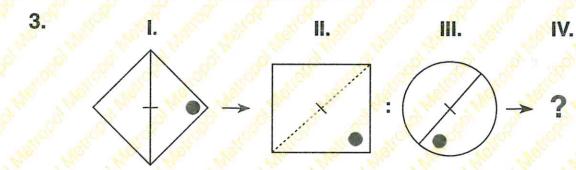
8.


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	D	D	C	C	E	B	A



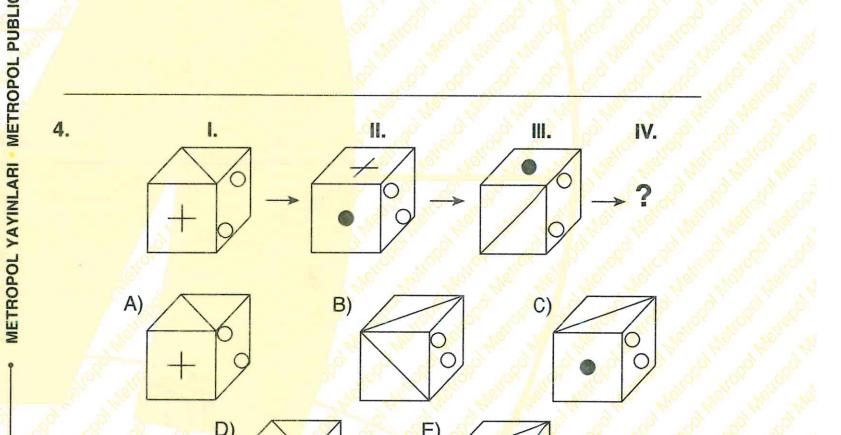
- A)
- B)
- C)
- D)
- E)



- A)
- B)
- C)
- D)
- E)



- A)
- B)
- C)
- D)
- E)



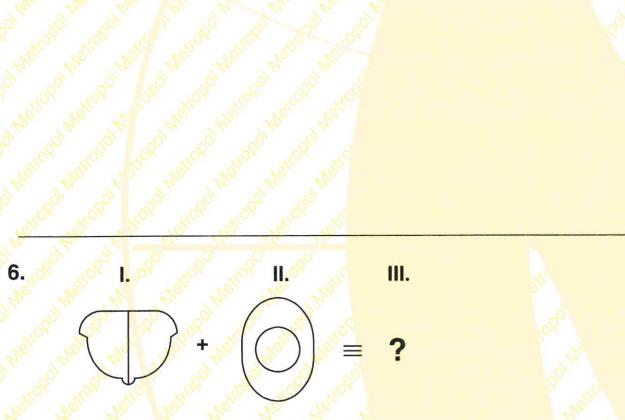
- A)
- B)
- C)
- D)
- E)

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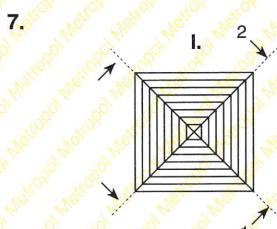
5. Aşağıdaki şeklärden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

- A)  B)  C)  D)  E) 



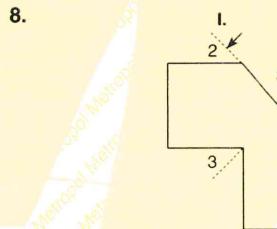
- I.  + II.  = ?
- A)  B)  C)  D)  E) 



Yukarıdaki şekil önce 1, sonra 2 ekseninden ok işaretini yönünde katlandığında aşağıdaki şeklärden hangisi elde edilir?

If the given figure folded first 1 and than 2 axis, which of the following figure is formed?

- A)  B)  C)  D)  E) 



Yukarıdaki şekil önce 1 ve 2 sonra 3 ekseninden ok işaretini yönünde katlandığında aşağıdaki şeklärden hangisi elde edilir?

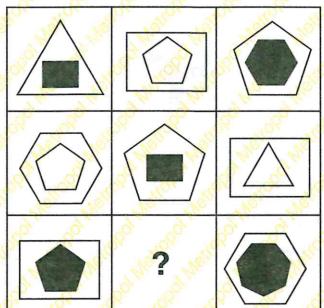
If the given figure folded first 1 and 2 then 3 axis, which of the following figure is formed?

- A)  B)  C)  D)  E) 

YANITLAR / ANSWERS

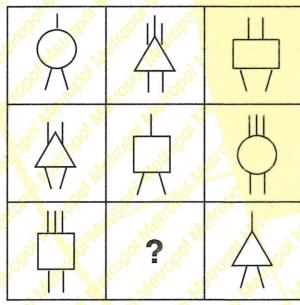
1	2	3	4	5	6	7	8
B	D	D	B	C	D	E	A

1.



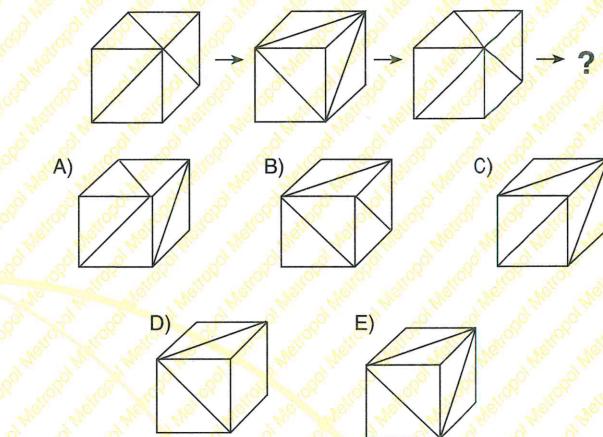
- A) B) C)
 D) E)

2.



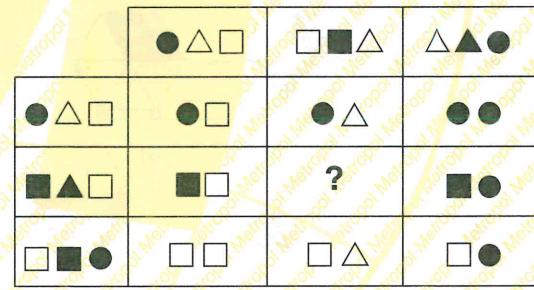
- A) B) C)
 D) E)

3.



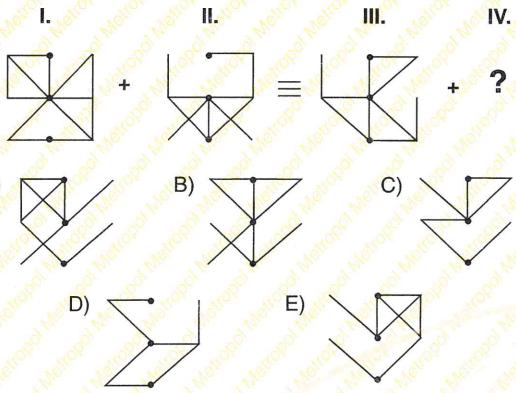
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4.

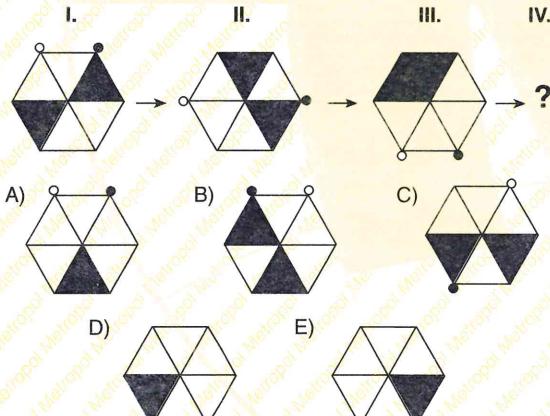


- A) B) C)
 D) E)

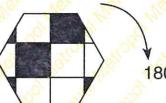
5.



6.

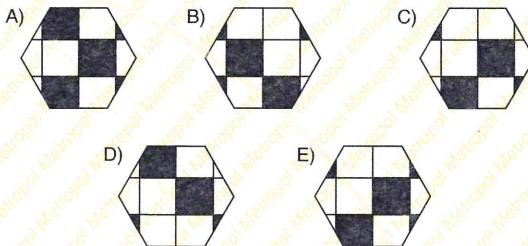


7.



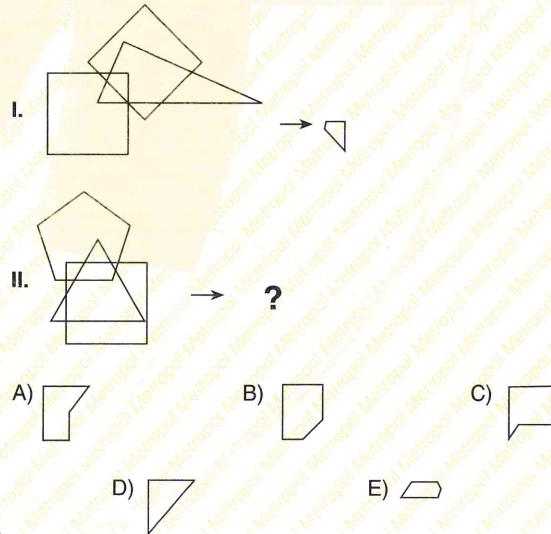
Yukarıdaki şekil 180° döndürülüğünde aşağıdaki şekillerden hangisi oluşur?

When the figure above rotates 180° , which of the followings figure is formed?



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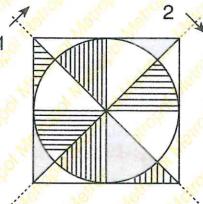
8.



YANITLAR / ANSWERS

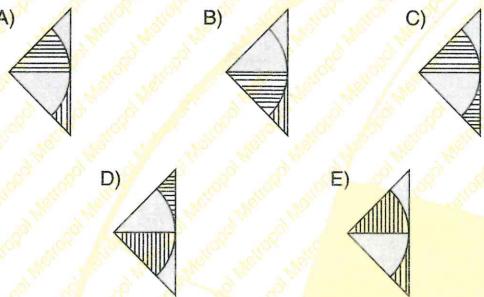
1	2	3	4	5	6	7	8
E	C	E	E	D	D	E	E

1.

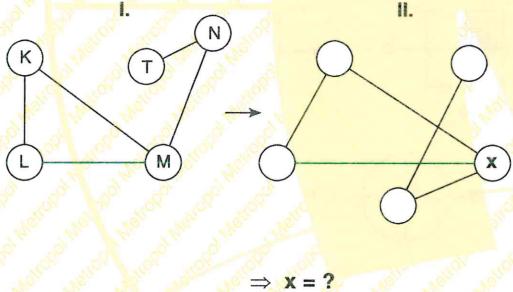


Yukarıdaki şekil 1 ve 2 eksenlerinden ok işaretleri yönünde katlandığında aşağıdaki şekillerden hangisi elde edilir?

If the given figure folded from 1 and 2 axis, which of the following figure is formed?



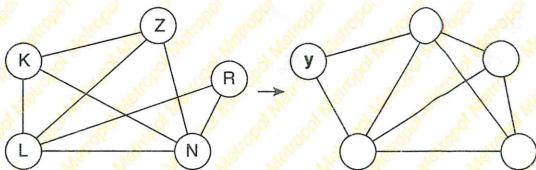
2.



- A) K
- B) L
- C) M
- D) N
- E) T

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3.



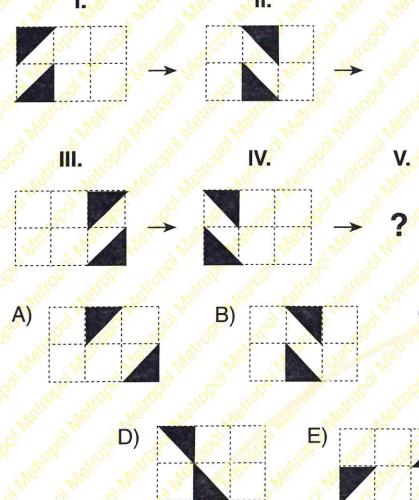
- A) R
- B) L
- C) N
- D) Z
- E) K

4.

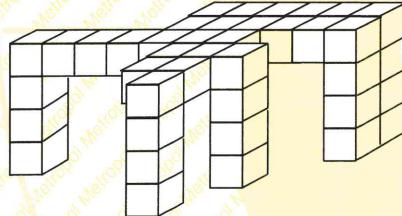
	$\square \triangle \circ$	$\circ \circ \Delta$	$\square \square \Delta$
$\triangle \square$	\circ	$\square \circ \circ$	\square
$\square \circ$	Δ	$\square \circ \Delta$	$\circ \square \Delta$
$\circ \Delta$	\square	$?$	$\circ \square \square$

- A) \triangle
- B) $\circ \Delta$
- C) $\triangle \triangle$
- D) \circ
- E) $\circ \circ$

5.



6.

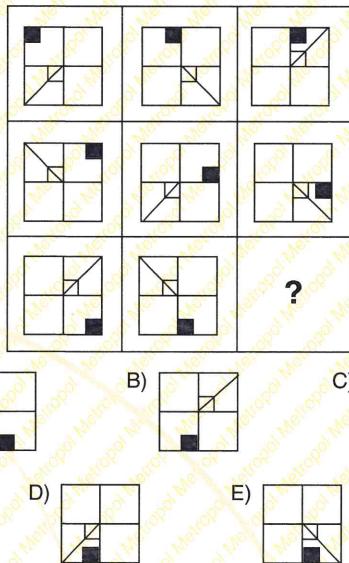


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

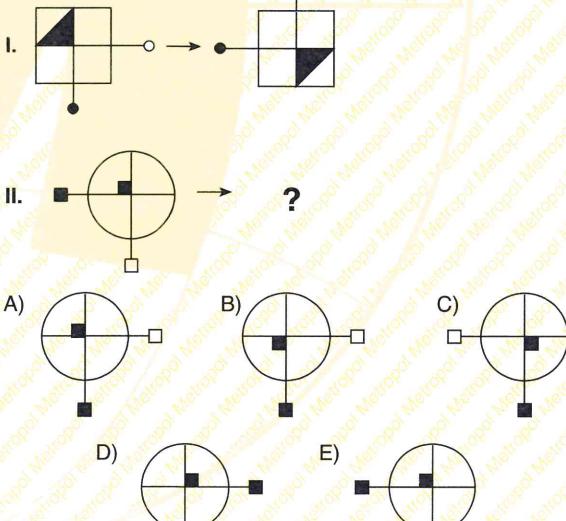
- A) 39
B) 40
C) 41
D) 42
E) 43

7.



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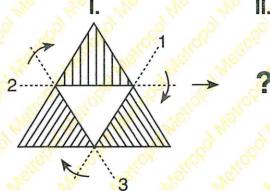
8.



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
C	C	A	D	C	B	D	C

1.

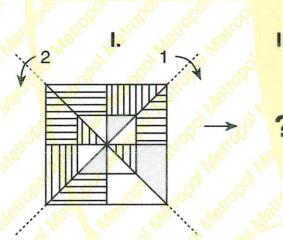


Yukarıdaki şekil önce 1 ve 2 sonra 3 ekseninden ok işaretti yönünde katlandığında aşağıdaki şekillerden hangisi elde edilir?

If the given figure folded first 1 and 2 then 3 axis, which of the following figure is formed?

- A)
- B)
- C)
- D)
- E)

2.

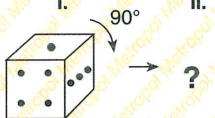


Yukarıdaki şekil önce 1 sonra 2 ekseninden ok işaretti yönünde katlandığında aşağıdaki şekillerden hangisi elde edilir?

If the given figure folded first 1 and 2 axis, which of the following figure is formed?

- A)
- B)
- C)
- D)
- E)

3.

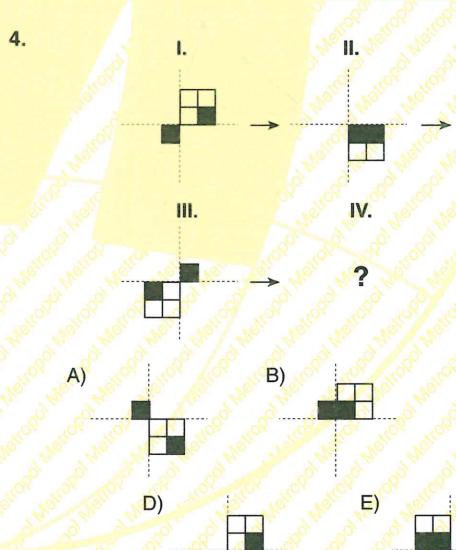


Yukarıdaki şekil 90° döndürülüğünde aşağıdaki şekillerden hangisi oluşur?

When the figure above rotates 90°, which of the followings figure is formed?

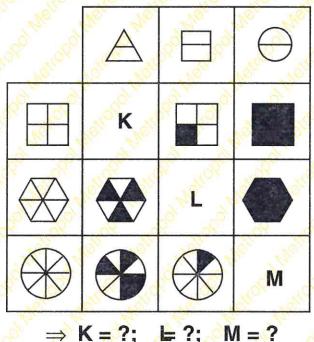
- A)
- B)
- C)
- D)
- E)

4.



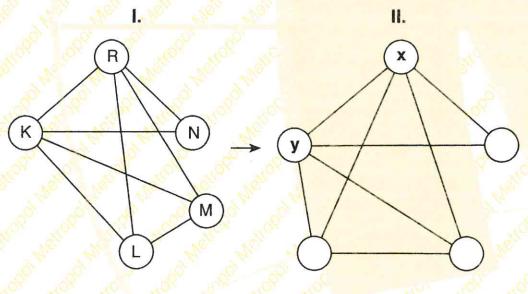
- A)
- B)
- C)
- D)
- E)

5.



- K L M**
- A) B) C) D) E)

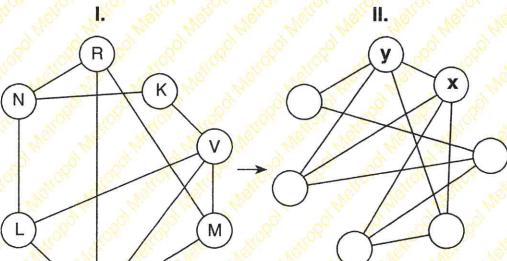
6.



$$\Rightarrow x = ? ; y = ?$$

- x y**
- A) K M
B) K L
C) K R
D) R M
E) R L

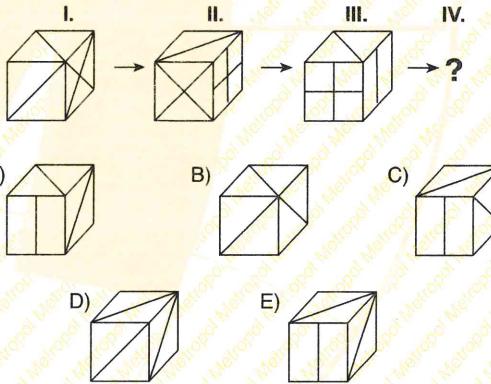
7.



$$\Rightarrow x = ? ; y = ?$$

- A) M ; T
B) T ; V
D) N ; T
E) N ; V

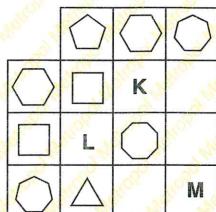
8.



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
A	E	A	E	A	C	B	E

1.



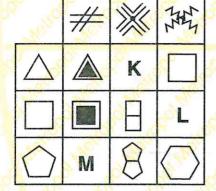
$$\Rightarrow K = ?$$

$$\Rightarrow L = ?$$

$$\Rightarrow M = ?$$

- A) B) C) D) E)

2.

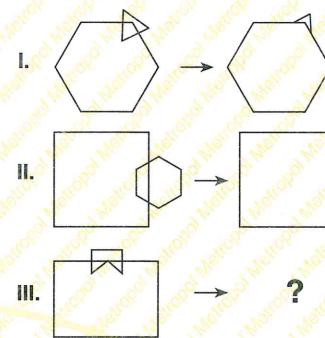


$$\Rightarrow K = ? , L = ? , M = ?$$

- A) B) C) D) E)

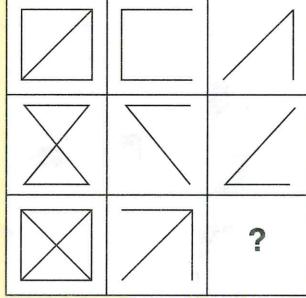
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3.



- A) B) C) D) E)

4.



- A) B) C) D) E)

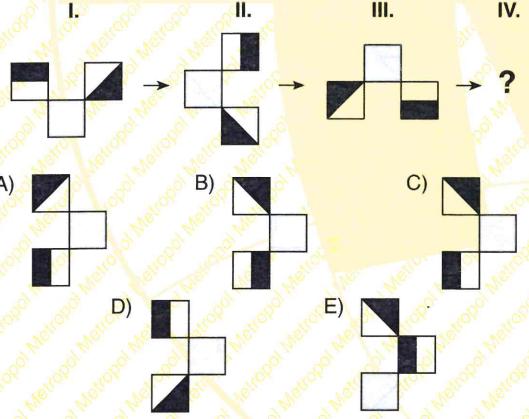
5.

+	a	b	c	d	e
a	K	L	M	N	E
b	L	R	R	S	T
c	M	R	U	V	Y
d	N	S	V	J	R
e	E	T	Y	X	W

$$\Rightarrow (a + b + c) - 3a = ?$$

- A) 0 B) 1 C) N D) R E) R - K

6.



- A) B) C) D) E)

7.



$$+ \blacksquare \rightarrow \blacksquare$$



$$+ \bullet + \circ \rightarrow ?$$

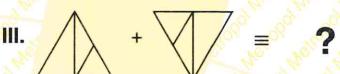
- A)
- B)
- C)
- D)
- E)

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8.



$$+ \text{ (triangle)} \equiv \text{ (triangle with diagonal)}$$



$$+ \text{ (triangle)} \equiv ?$$

- A)
- B)
- C)

$$+ \text{ (triangle)} \equiv ?$$

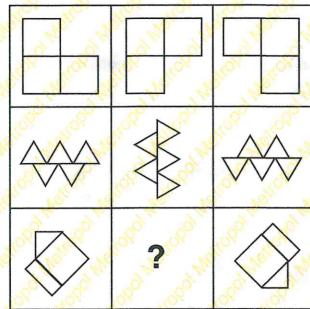
- D)
- E)



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	D	C	C	E	C	E	D

1.



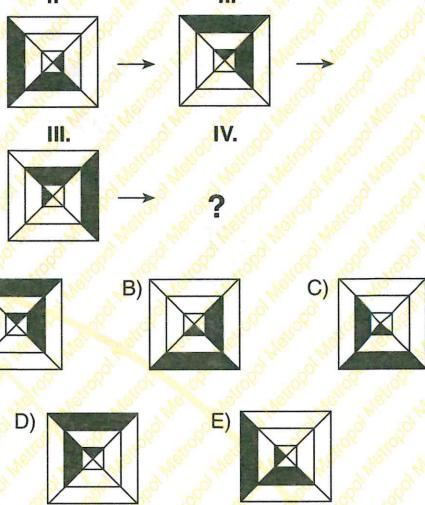
- A)
 B)
 C)
 D)
 E)

2. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

- A)
 B)
 C)
 D)
 E)

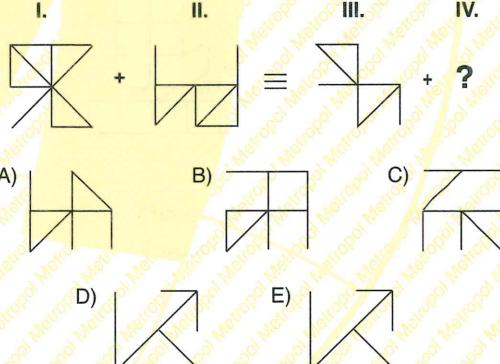
3.



- A)
 B)
 C)
 D)
 E)

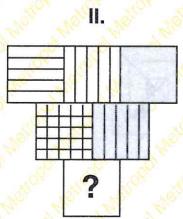
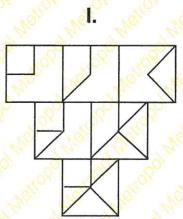
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4.



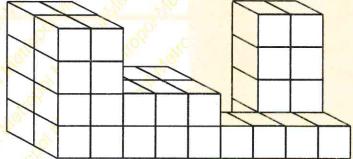
- A)
 B)
 C)
 D)
 E)

5.



- A) B) C) D) E)

6.

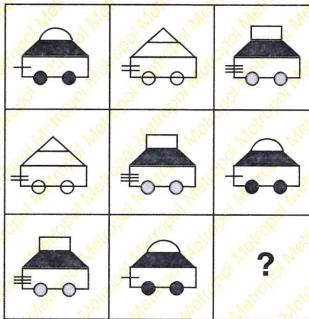


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

- A) 38
B) 40
C) 42
D) 44
E) 46

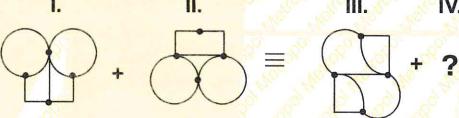
7.



- A) B) C) D) E)

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8.



- A) B) C) D) E)

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	D	C	E	B	B	E	C

1.

	$\triangle \square \bullet$	$\bullet \square \blacksquare$	$\blacktriangle \bullet \triangle$
$\bullet \blacktriangle$	\bullet	\bullet	$\bullet \blacktriangle$
$\circ \blacksquare$	—	?	—
$\square \triangle$	$\square \triangle$	\square	\triangle

- A) \blacksquare B) \circ C) $\triangle \bullet$
 D) $\circ \blacksquare$ E) $\blacktriangle \bullet$

2.

	K	L	M

$$\Rightarrow (M \cdot (L \cdot K)) = ?$$

- A)
- B)
- C)
- D)
- E)

3.

?	?	?

- A)
- B)
- C)
- D)
- E)

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4.

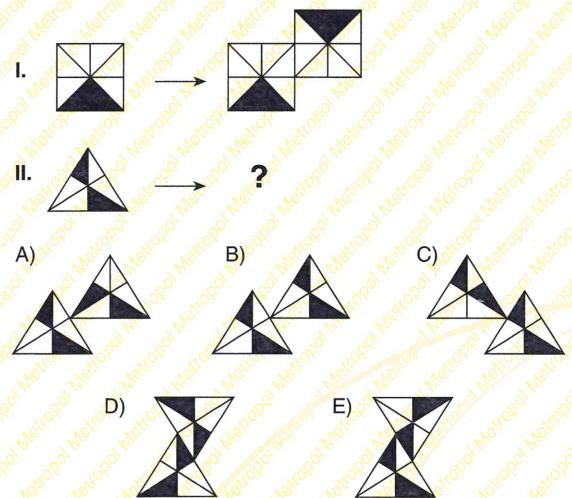
*	a	b	c	d	e
a	b	c	d	e	a
b	c	d	e	a	b
c	d	e	a	b	c
d	e	a	b	c	d
e	a	b	c	d	e

$$\Rightarrow [(a * d) \square (c \square b)] * a] \square e = ?$$

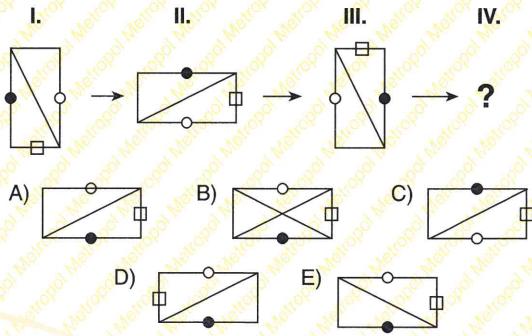
- A) a B) b C) c
 D) d E) e

□	a	b	c	d	e
a	d	e	a	b	c
b	e	a	b	c	d
c	a	b	c	d	e
d	b	c	d	e	a
e	c	d	e	a	b

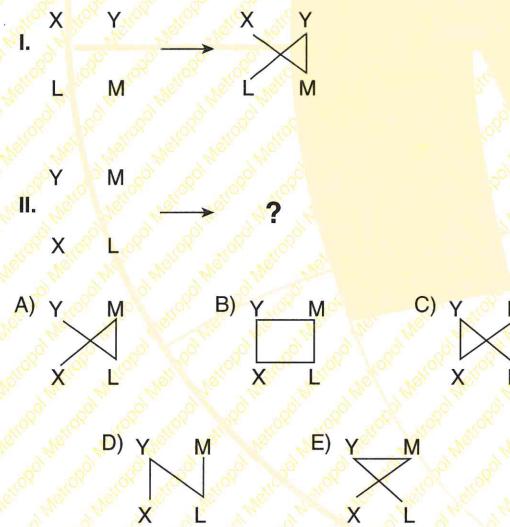
5.



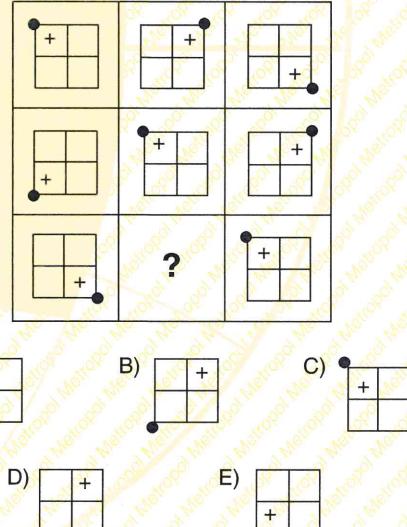
7.



6.



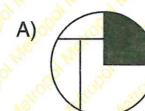
8.



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
A	C	C	B	D	E	D	E

1.

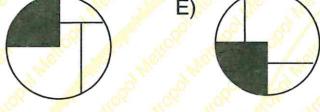


B)

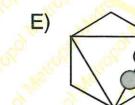
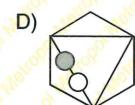
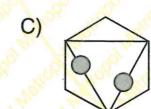
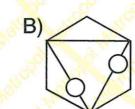
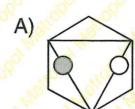
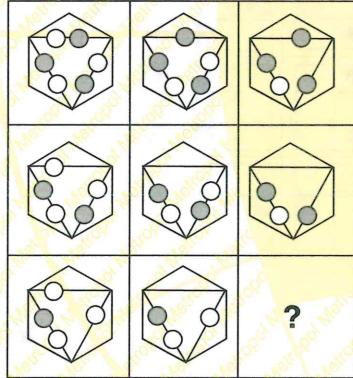
C)

D)

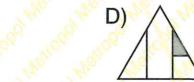
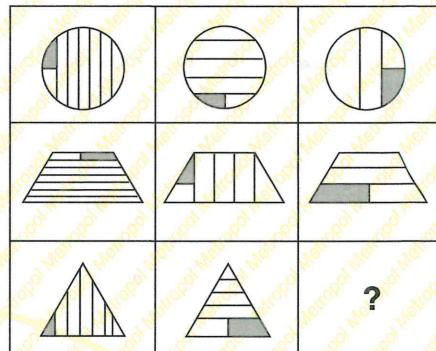
E)



2.

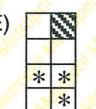
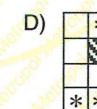
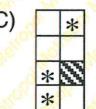
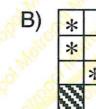
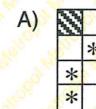
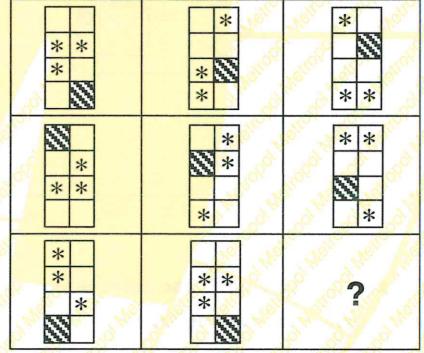


3.

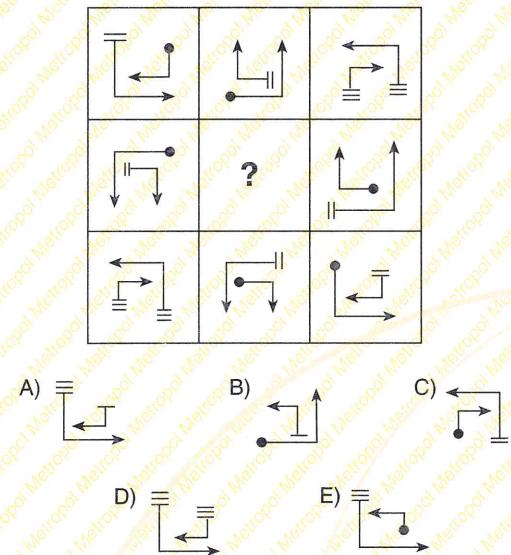


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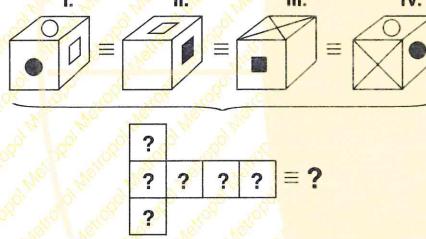
4.



5.

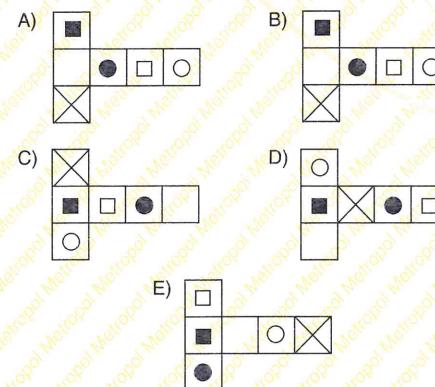


6.

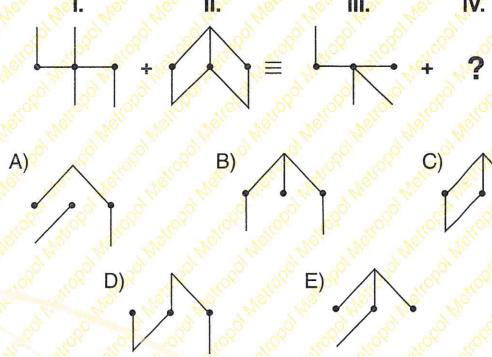


Yukarıdaki şekillerin tümü aynı küpe aittir. Buna göre, küpün açılmış hali aşağıdakilerden hangisidir?

All the figures above represent the same cube. Which of the following figures represents the unfolded form of this cube?

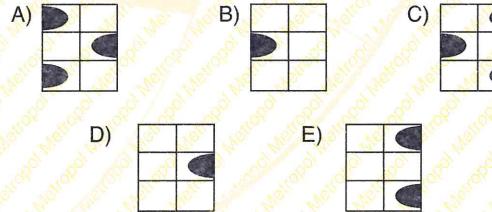
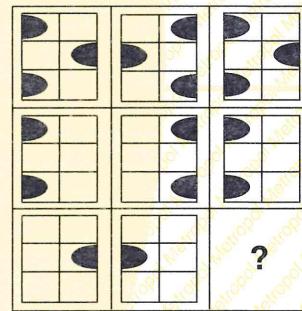


7.



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8.



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
A	D	D	C	D	D	C	D

1

Sonuç (Result)				
KL	MK	ML	MK	KM
LM	KN	TK	TM	LN
NT	MT	KL	LT	NMT
KN	LL	TN	KL	TL
LM	KL	TT	NN	?
NT	KT	LN	TL	TK

- A) M B) K C) MK D) ML E) KN

2.

$\Rightarrow K = ? ; L = ?$

- A)  ; 
 B)  ; 
 C)  ; 
 D) 
 E) 

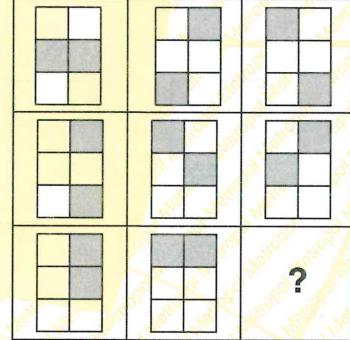
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ME

□	○	△	○	○
△	□	○	□	□
I	II	○	□	○
?		□	△	○

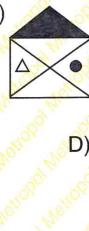
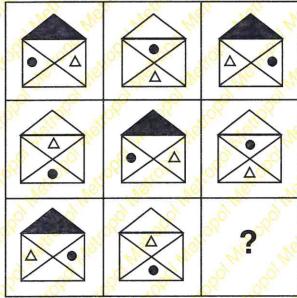
- A) $\square \circlearrowleft$ B) $\square \triangleleft$ C) $\triangle \circlearrowleft$
D) $\triangle \squareleftarrow$ E) $\circlearrowleft \triangle$

ME

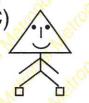
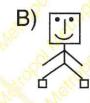
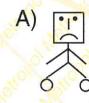
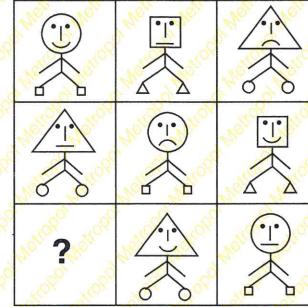


- A)  B)  C) 
D)  E) 

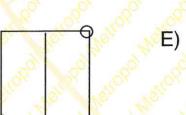
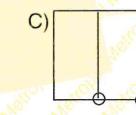
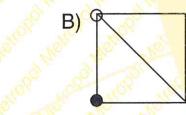
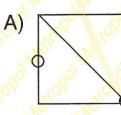
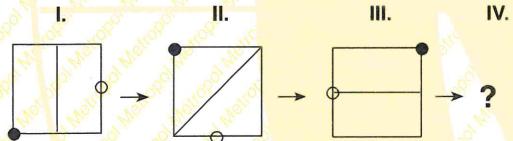
5.



7.

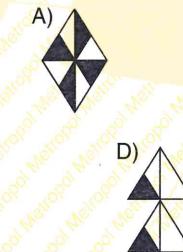
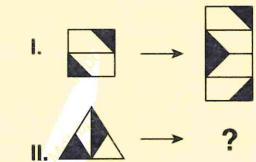


6.



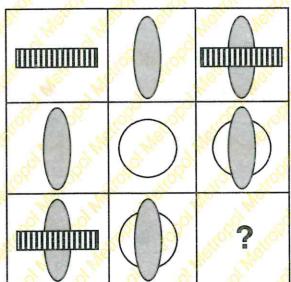
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8.


YANITLAR / ANSWERS

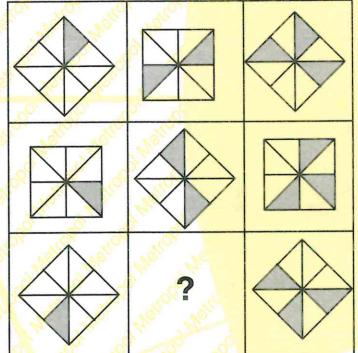
1	2	3	4	5	6	7	8
C	C	C	D	E	E	E	E

1.



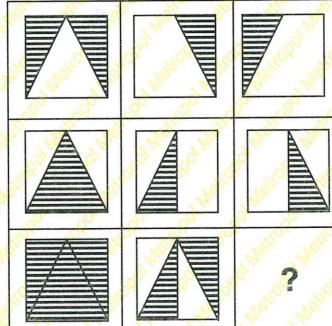
- A) B) C) D) E)

2.



- A) B) C) D) E)

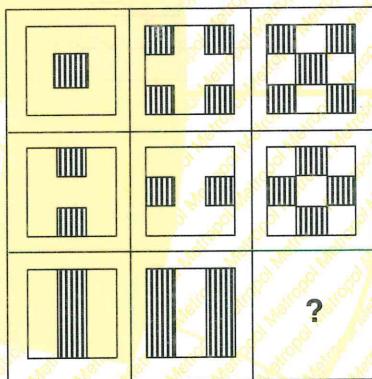
3.



- A) B) C) D) E)

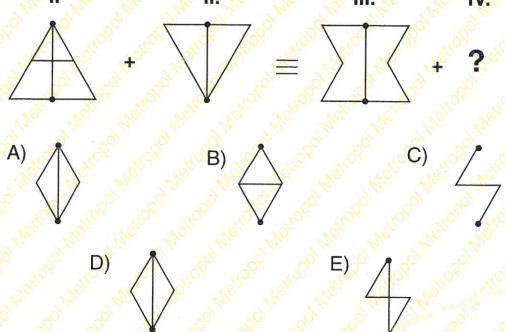
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4.

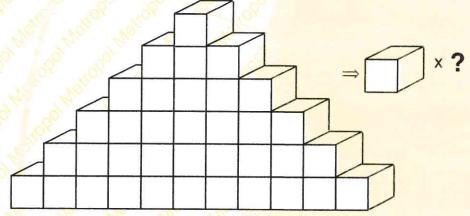


- A) B) C) D) E)

5.

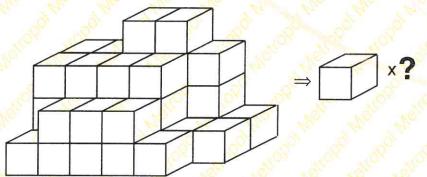


6.



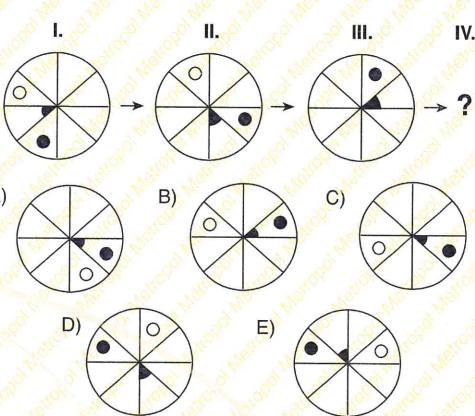
- A) 32
B) 33
C) 34
D) 35
E) 36

7.

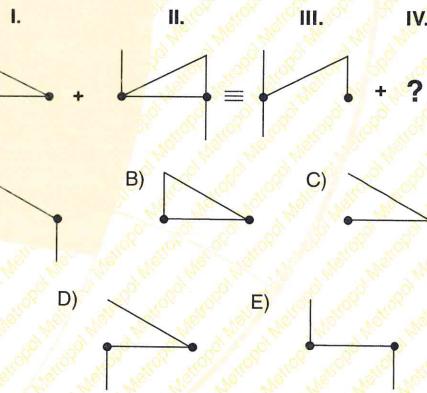


- A) 39 B) 40 C) 41 D) 42 E) 43

8.



9.

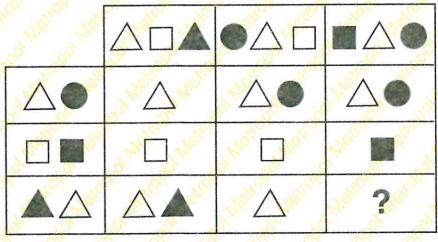


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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
C	D	D	D	B	E	B	E	C

1.



- A)
 B)
 C)
 D)
 E)

2.

Sonuç (Result)				

- A)
 B)
 C)
 D)
 E)

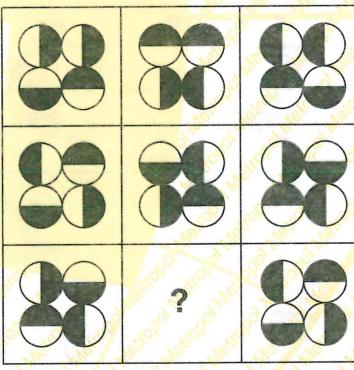
3.

$$\Rightarrow (\triangle \star \square) \star (\square \star \square) = ?$$

- A)
 B)
 C)
 D)
 E)

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4.



- A)
 B)
 C)
 D)
 E)



- A)
- B)
- C)
- D)
- E)

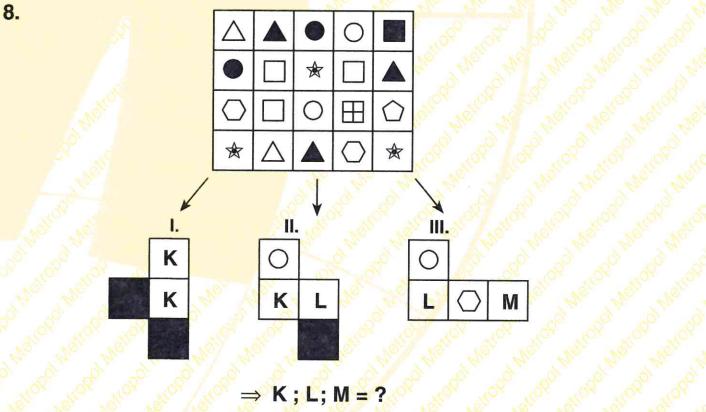


- A)
- B)
- C)
- D)
- E)



- A)
- B)
- C)
- D)
- E)

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I, II ve III yukarıdaki tablonun farklı birer parçasıdır. Buna göre, K, L, M ve N nin yerine aşağıdakilerden hangisi gelmelidir?

I, II and III are three different parts of the table above. Which of the following do K, L, M and N stand for?

- A) □; O; ★ B) ▲; ★; ● C) O; △; ★
 D) □; △; ▲ E) □; ▲; ★

YANITLAR / ANSWERS

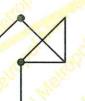
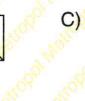
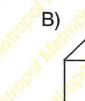
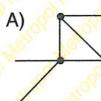
1	2	3	4	5	6	7	8
C	E	C	E	E	E	B	E

1.



≡

?



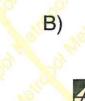
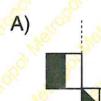
2.



→

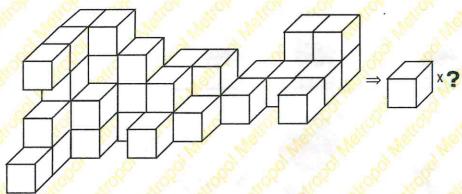


?



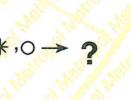
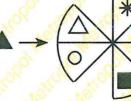
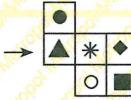
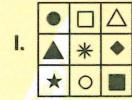
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3.



- A) 37
B) 38
C) 39
D) 40
E) 41

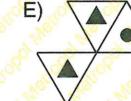
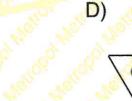
4.



- A)



- B)



- C)



- D)

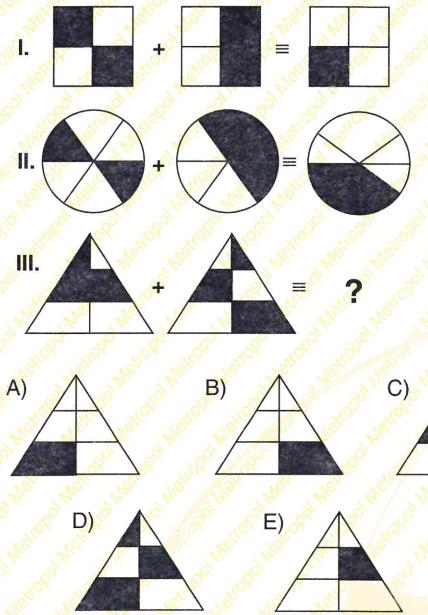


- E)

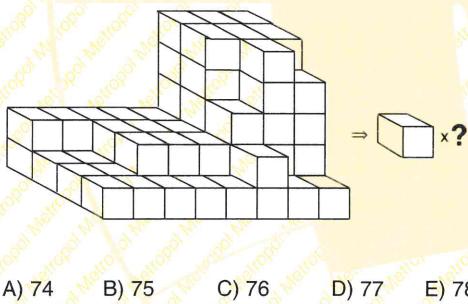


Bölüm / Chapter 2

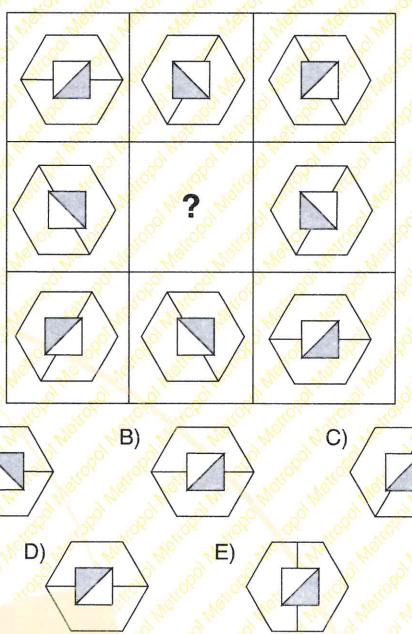
5.



6.

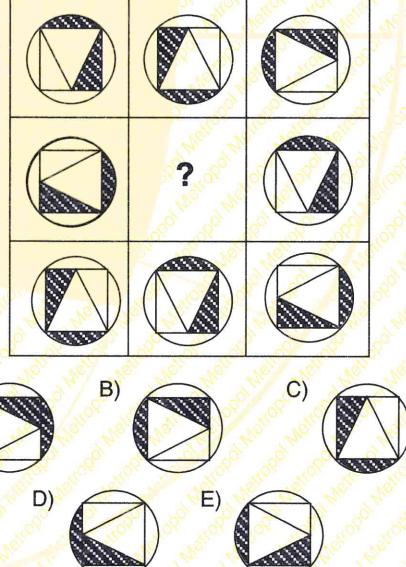


7.



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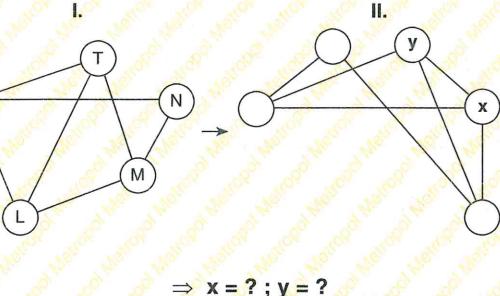
8.



YANITLAR / ANSWERS

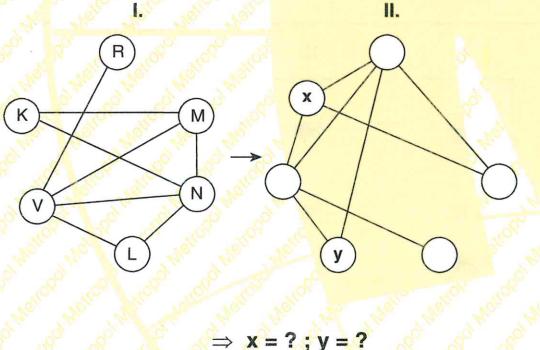
1	2	3	4	5	6	7	8
E	D	B	C	A	D	B	B

1.



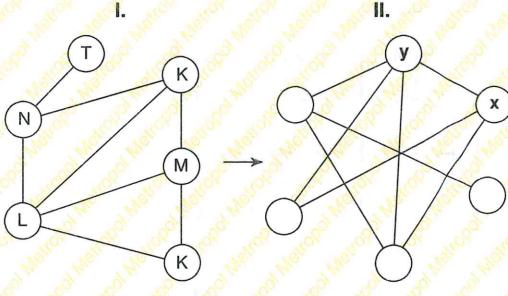
- A) T ; K
- B) L ; M
- C) L ; N
- D) M ; N
- E) T ; L

2.



- A) K ; L
- B) M ; L
- C) M ; K
- D) R ; K
- E) V ; L

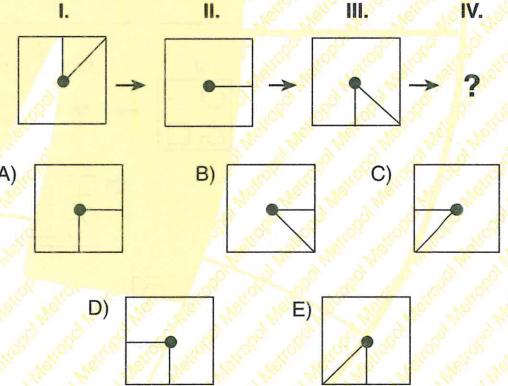
3.



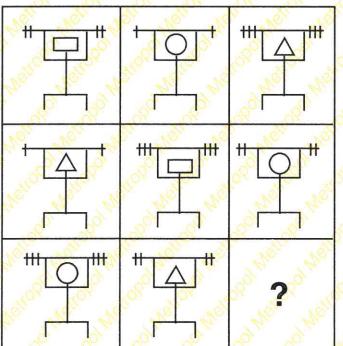
- A) M ; L
- B) N ; L
- C) K ; L
- D) M ; N
- E) K ; M

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4.



5.

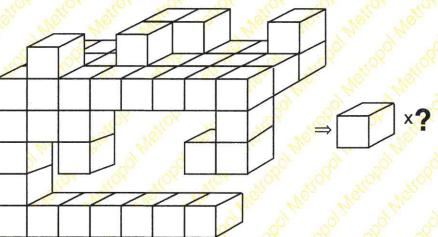


- A)
- B)
- C)
- D)
- E)

6.

- I.
- II.
- III.
- IV.
- A)
- B)
- C)
- D)
- E)

7.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

- A) 41
- B) 42
- C) 43
- D) 44
- E) 45

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8.

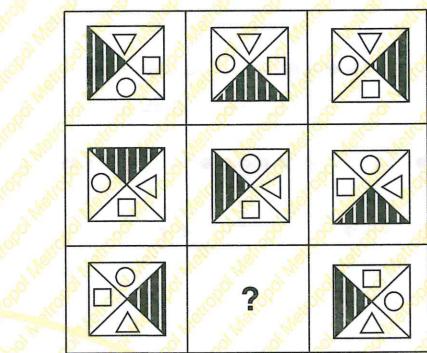
- I.
- II.
- III.
- IV.
- V.
- A)
- B)
- C)
- D)
- E)

YANITLAR / ANSWERS

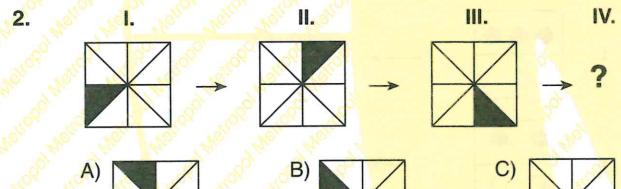
1	2	3	4	5	6	7	8
E	B	A	D	D	C	E	A



- A) B) C) D) E)

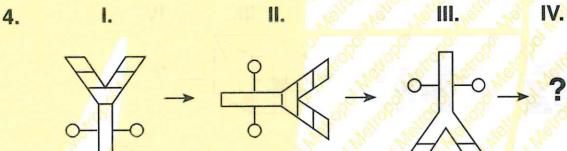


- A) B) C) D) E)

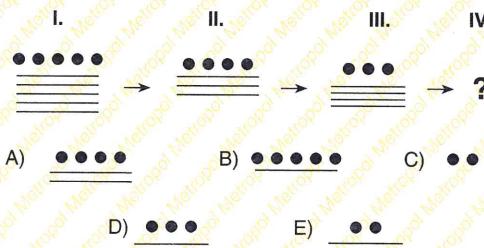
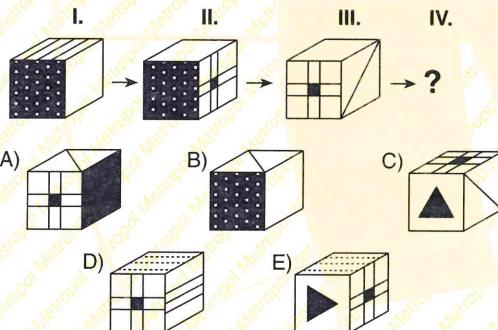
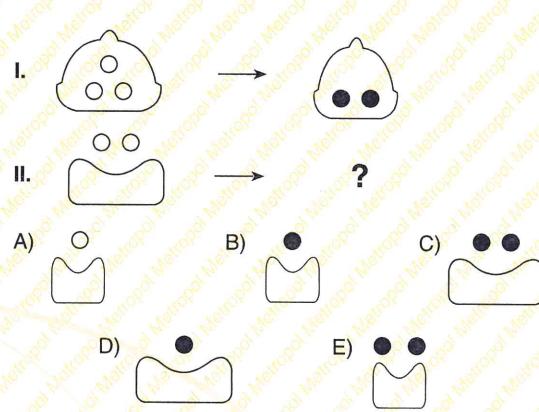


- A) B) C) D) E)

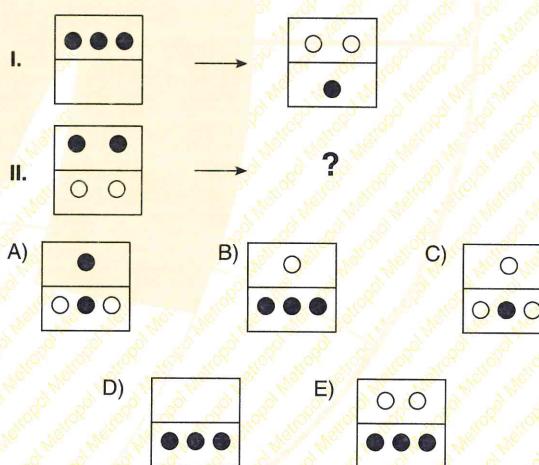
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- A) B) C) D) E)

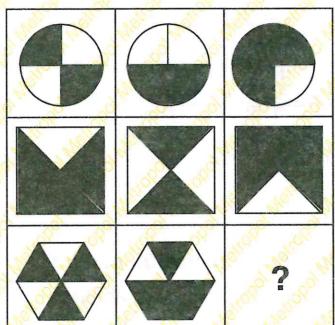
5.**6.****7.**

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8.
YANITLAR / ANSWERS

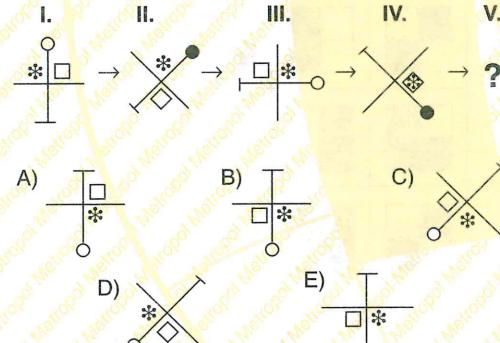
1	2	3	4	5	6	7	8
A	B	C	A	E	A	B	C

1.

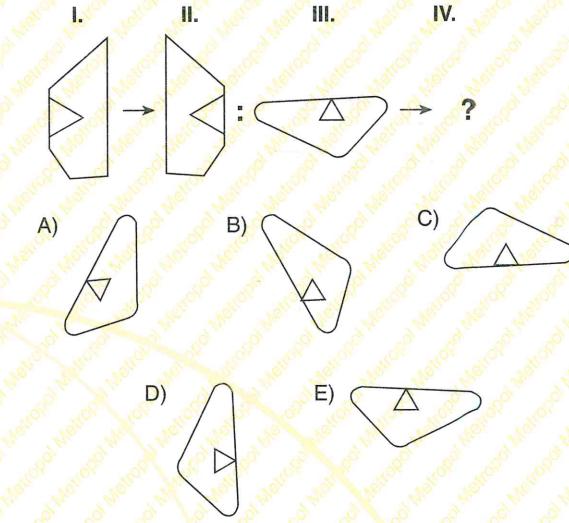


- A)
- B)
- C)
- D)
- E)

2.

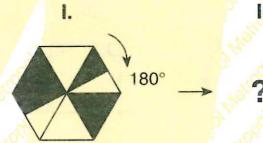


3.



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4.

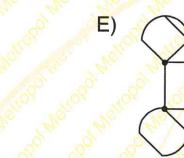
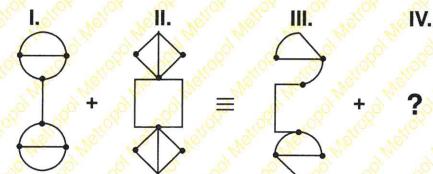


Yukarıdaki şekil 180° döndürüldüğünde aşağıdaki şekillerden hangisi oluşur?

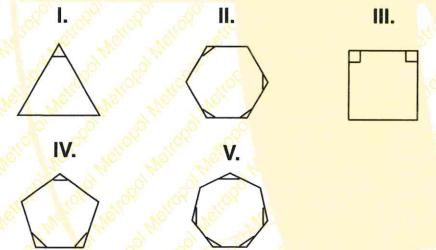
When the figure above rotates 180° , which of the following figures is formed?

- A)
- B)
- C)
- D)
- E)

5.



6.

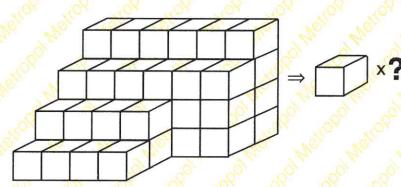


Yukarıdaki şekiller belli birer sıraya konulduğunda, aşağıda kilerden hangisi üçüncü şekil olur?

If we put the above figures in orden, which will be the third figure?

- A) I B) II C) III D) IV E) V

7.



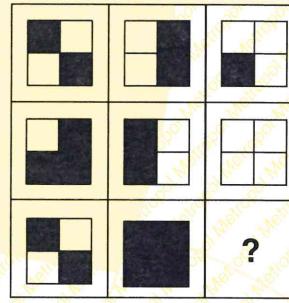
Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

- A) 54
B) 55
C) 56
D) 57
E) 58

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8.

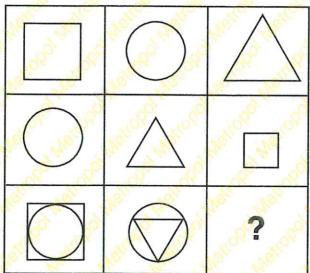


- A)
B)
C)
D)
E)

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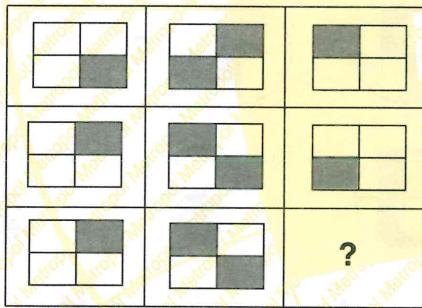
1	2	3	4	5	6	7	8
D	B	E	B	B	D	A	D

1.



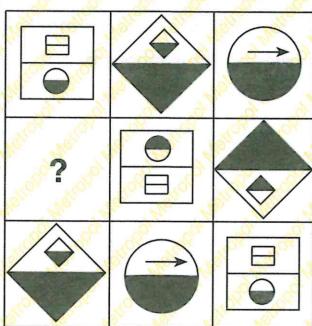
- A)
- B)
- C)
- D)
- E)

2.



- A)
- B)
- C)
- D)
- E)

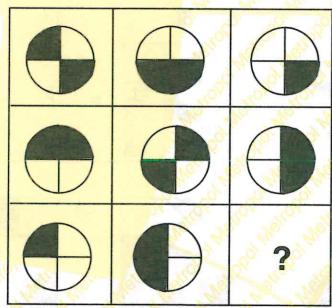
3.



- A)
- B)
- C)
- D)
- E)

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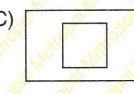
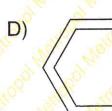
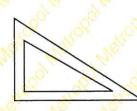
4.



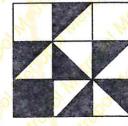
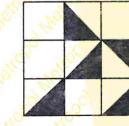
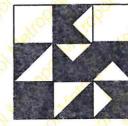
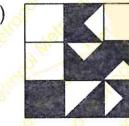
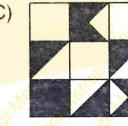
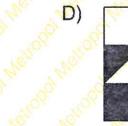
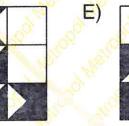
- A)
- B)
- C)
- D)
- E)

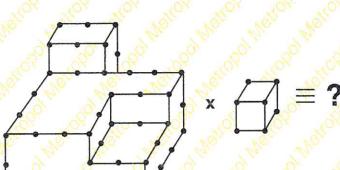
5. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

- A)  B)  C) 
- D)  E) 

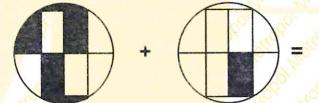
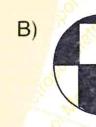
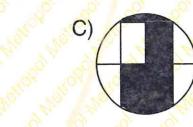


- 6.
- | | | |
|---|---|-------|
| I. | II. | III. |
|  |  | $= ?$ |
- A)  B)  C) 
- D)  E) 

- 7.
- 

- A) 26
B) 28
C) 30
D) 32
E) 34

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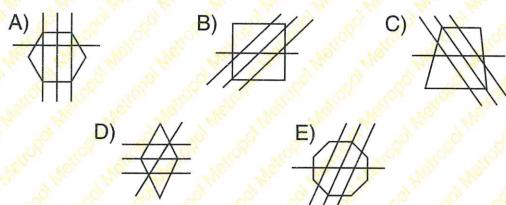
- 8.
- 
- A)  B)  C) 
- D)  E) 

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1	2	3	4	5	6	7	8
C	C	D	C	C	A	D	D

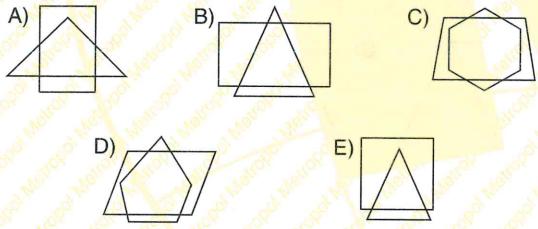
1. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

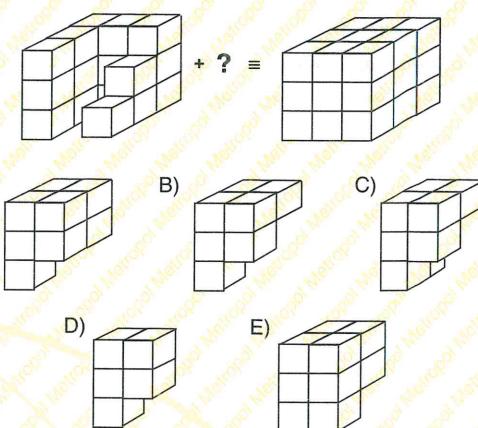


2. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

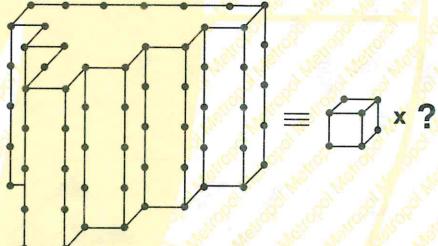


3.



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4.



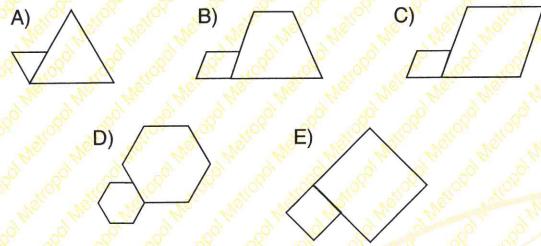
Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

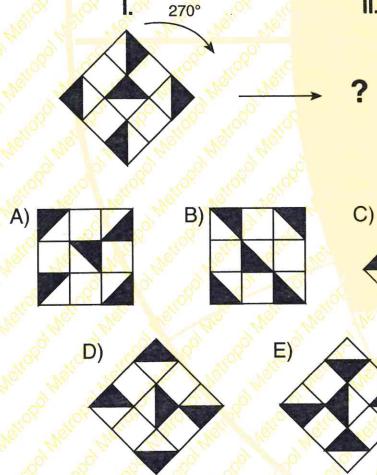
- A) 48
B) 50
C) 52
D) 54
E) 56

5. Aşağıdakilerden hangisi diğerlerinden farklıdır?

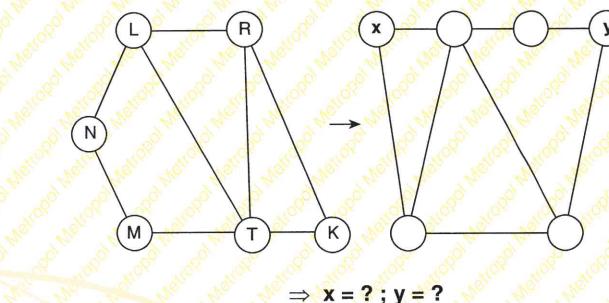
Which of the following figure is different?



6.



7.

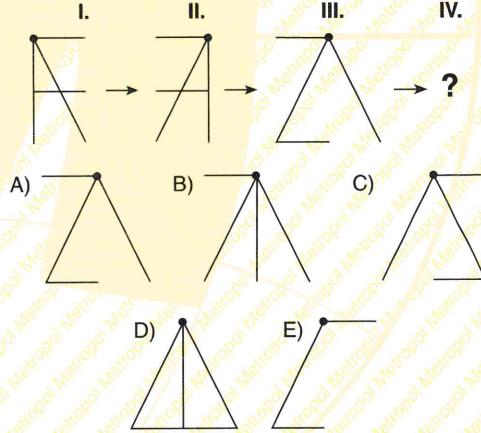


$$\Rightarrow x = ? ; y = ?$$

- | | |
|----------|----------|
| x | y |
| A) N | M |
| B) M | K |
| C) K | L |
| D) K | N |
| E) N | M |

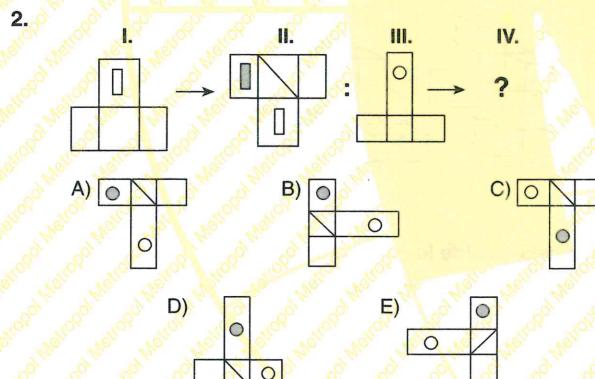
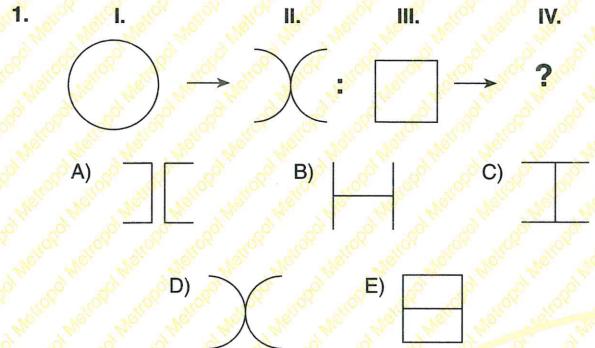
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8.

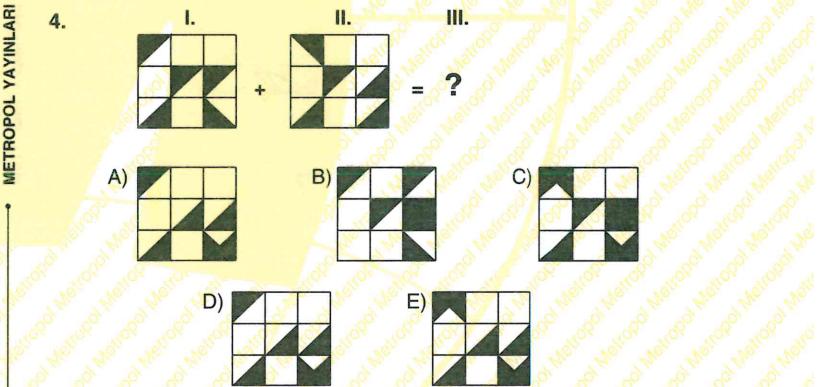
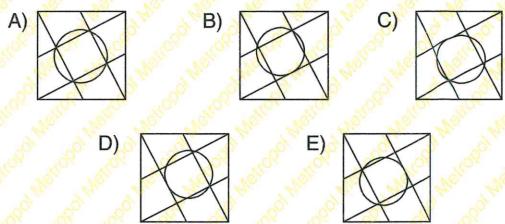


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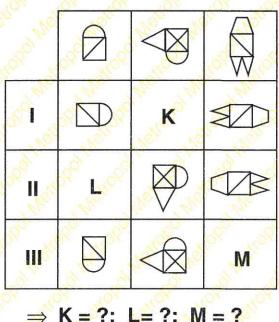
1	2	3	4	5	6	7	8
A	E	C	C	B	C	D	C



3. Aşağıdaki şemillerden hangisi diğerlerinden farklıdır?

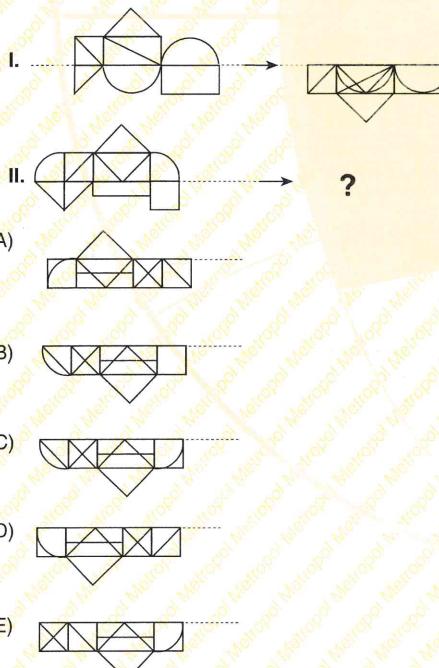


5.

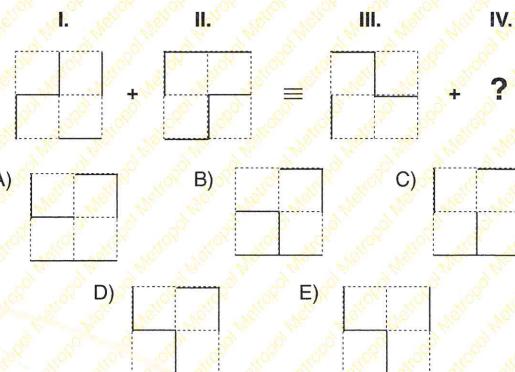


- A)
- B)
- C)
- D)
- E)

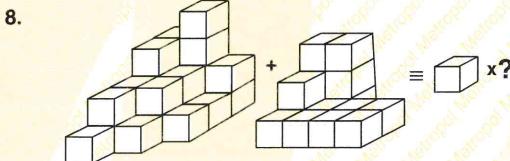
6.



7.



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Yukarıdaki şekilde kaç tane küp vardır?

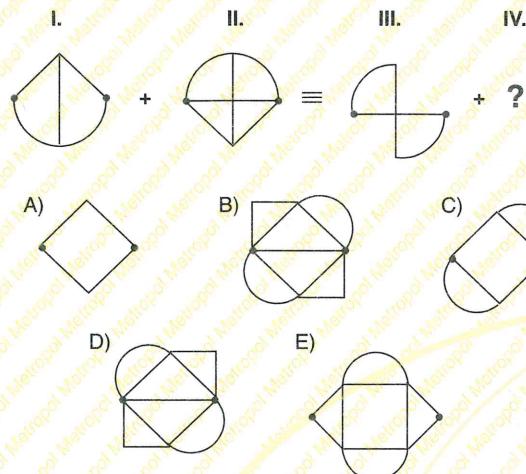
How many cubes are in the figure above?

- A) 37
- B) 38
- C) 39
- D) 40
- E) 41

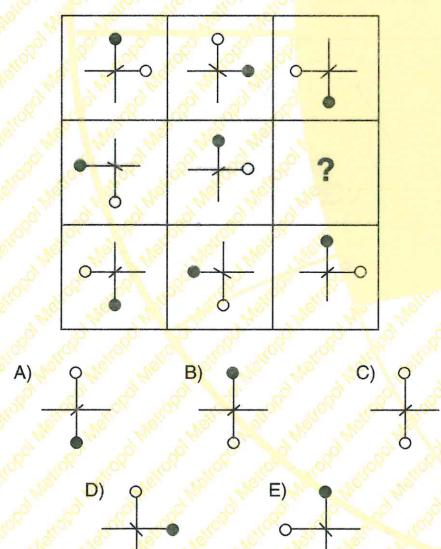
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
C	A	A	C	E	C	D	C

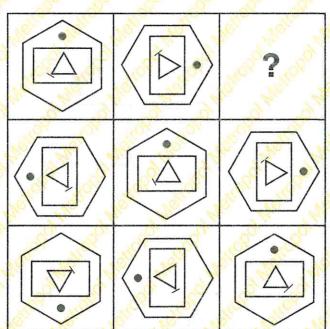
1.



2.

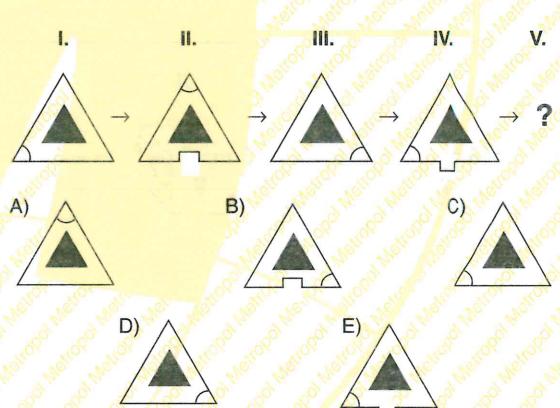


3.

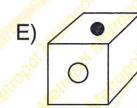
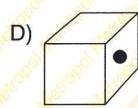
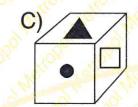
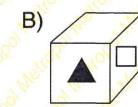
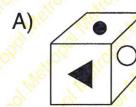
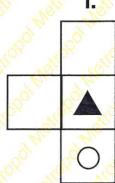


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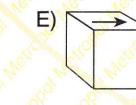
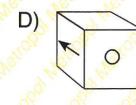
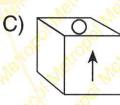
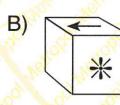
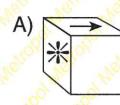
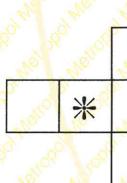
4.



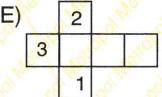
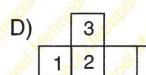
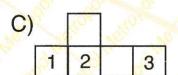
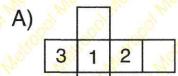
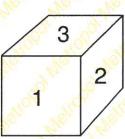
5.



6.

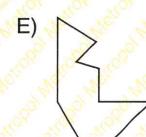
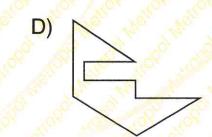
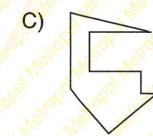
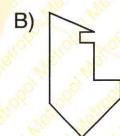
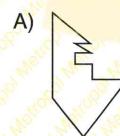
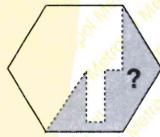


7.



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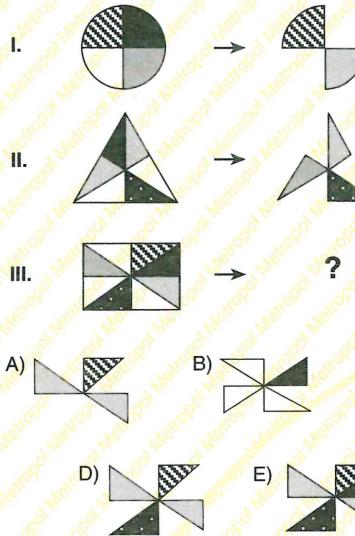
8.



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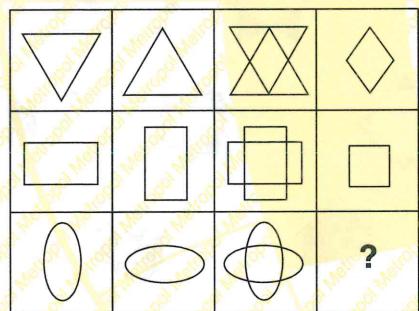
1	2	3	4	5	6	7	8
C	D	E	A	A	E	D	D

1.



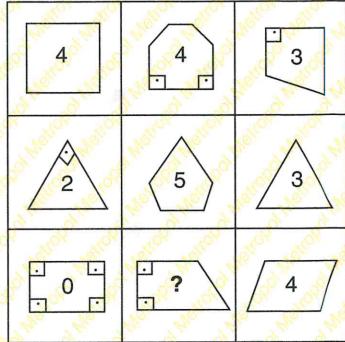
- A)
 B)
 C)
 D)
 E)

2.



- A)
 B)
 C)
 D)
 E)

3.



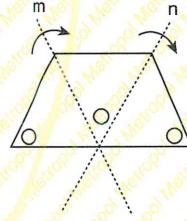
- A) 1
 B) 2
 C) 3
 D) 4
 E) 5

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4. Yandaki şekil önce m, sonra n ekseninden katlandığında aşağıdakilerden hangisi elde edilir?

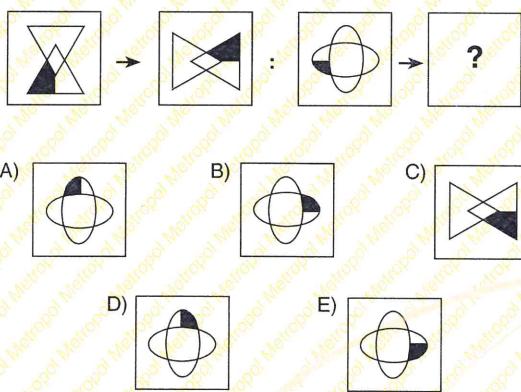
If the above figure in folded first from m, then from n axis, which of the following figure could be obtained?

Which of the following figure stand for?

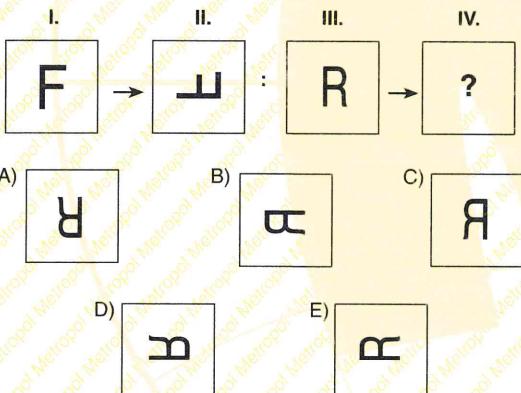


- A)
 B)
 C)
 D)
 E)

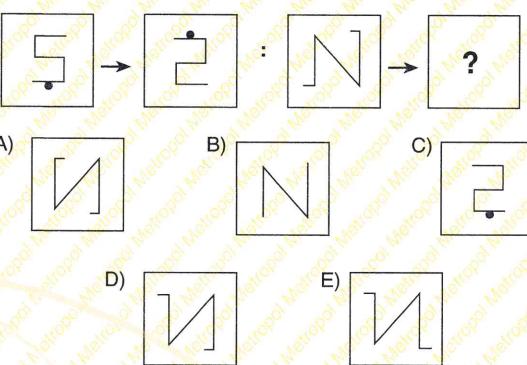
5.



6.

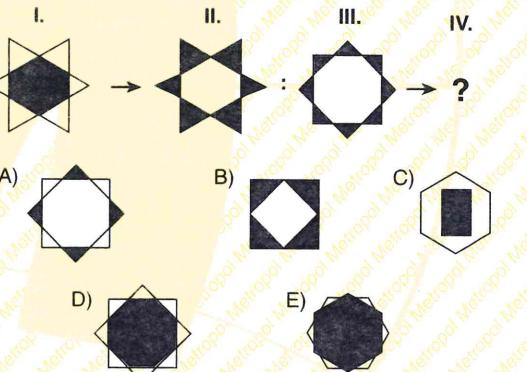


7.



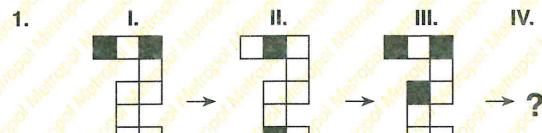
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8.

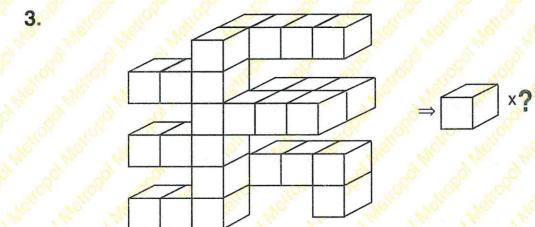


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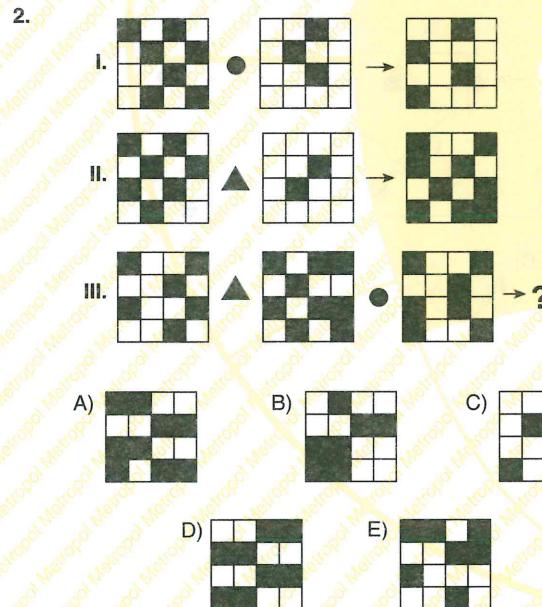
1	2	3	4	5	6	7	8
D	D	B	D	D	D	D	D



- A)
- B)
- C)
- D)
- E)



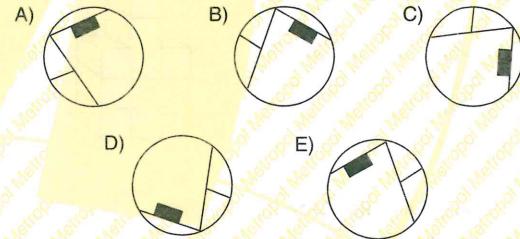
- A) 25 B) 26 C) 27 D) 28 E) 29



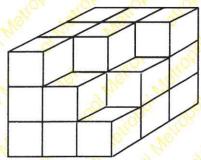
- A)
- B)
- C)
- D)
- E)

4. Aşağıdakilerden hangisi diğerlerinden farklıdır?

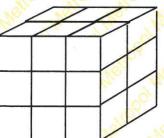
Which of the following figure is different?



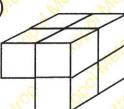
5.



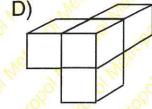
+ ? =



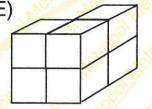
A)



D)



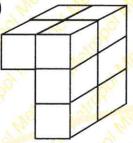
E)



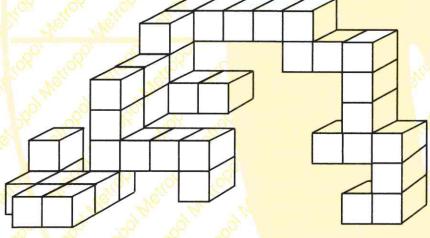
B)



C)



6.

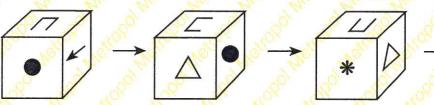


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are in the figure above?

- A) 34
B) 35
C) 36
D) 37
E) 38

7.



A)



B)



D)



E)



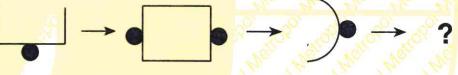
III.

IV.

?

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8.



A)



B)



C)



D)

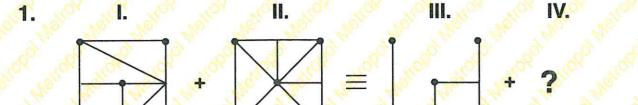


E)



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1	2	3	4	5	6	7	8
C	D	B	E	D	E	E	A



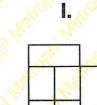
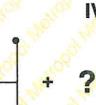
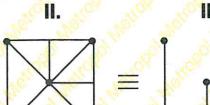
A)

B)

C)

D)

E)



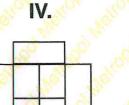
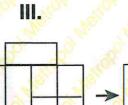
A)

B)

C)

D)

E)



F)

G)

H)

I)

J)



A)

B)

C)

D)

E)

F)

G)

H)

I)

J)

K)

L)

M)

N)

O)

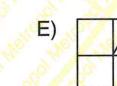
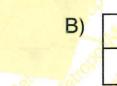
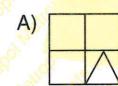
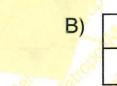
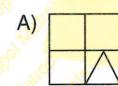
P)

Q)

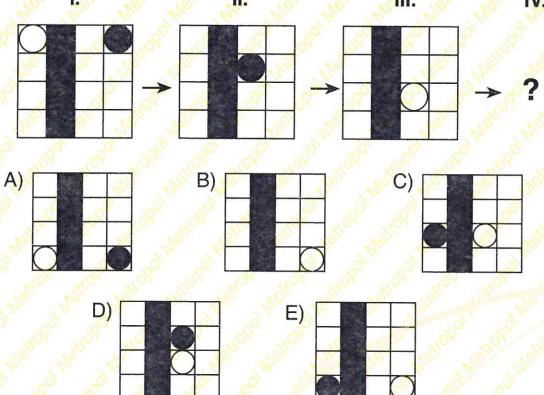
R)

S)

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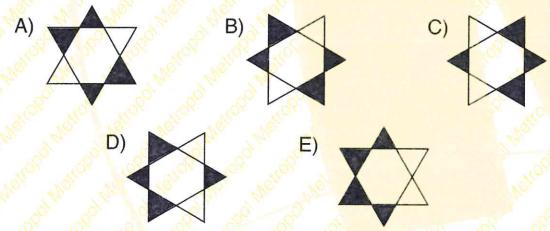


5.

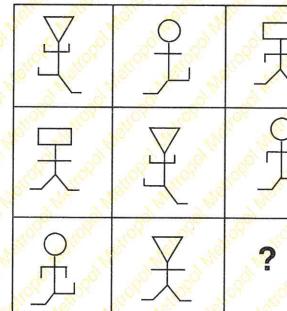


6. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

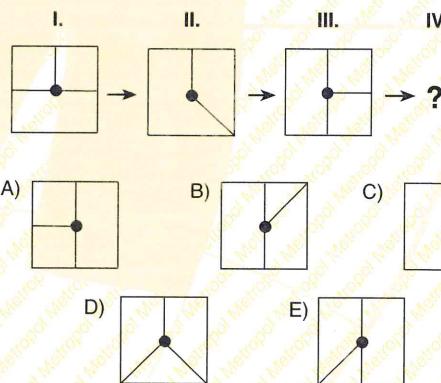


7.



- A) B) C)
D) E)

8.



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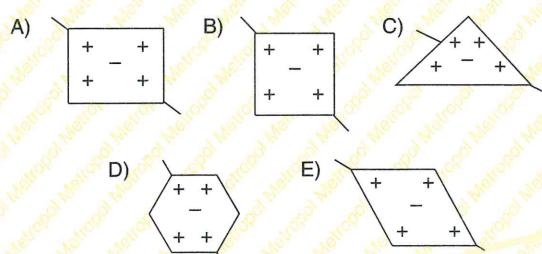


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1	2	3	4	5	6	7	8
A	E	D	B	E	E	E	E

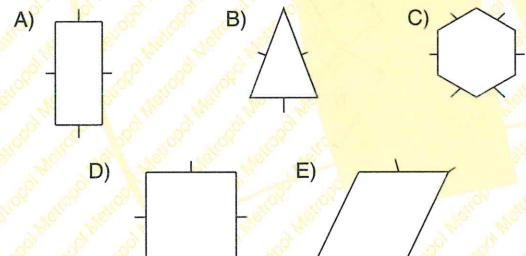
1. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?



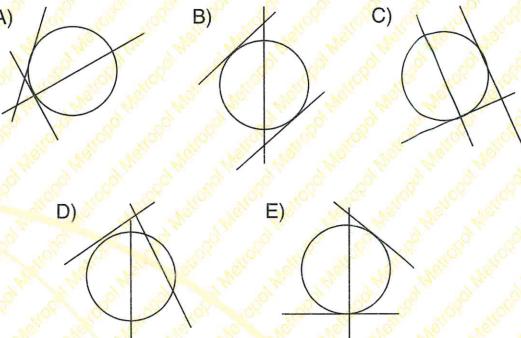
2. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

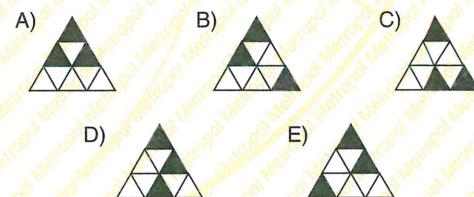
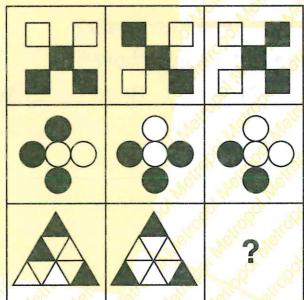


3. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

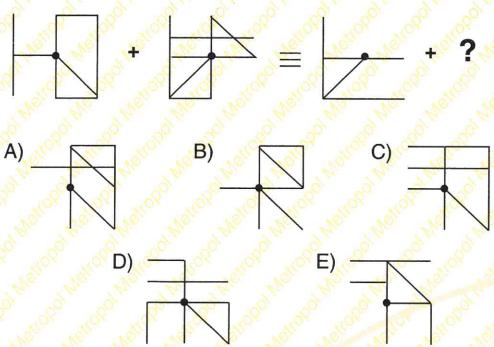
Which of the following figure is different?



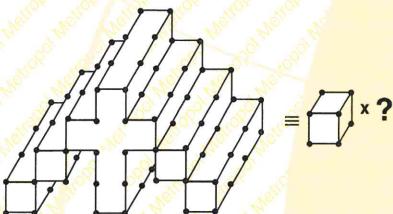
4.



5.



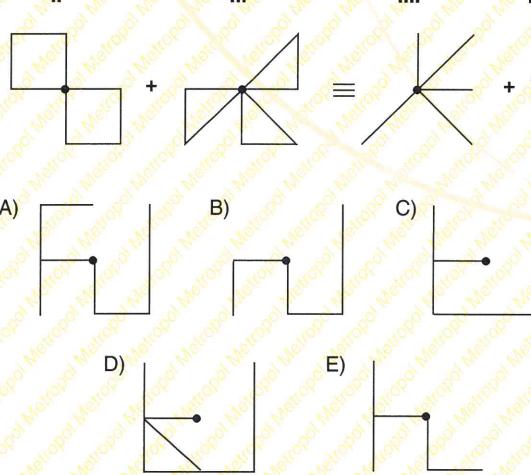
6.

**Yukarıdaki şekilde kaç tane küp vardır?**

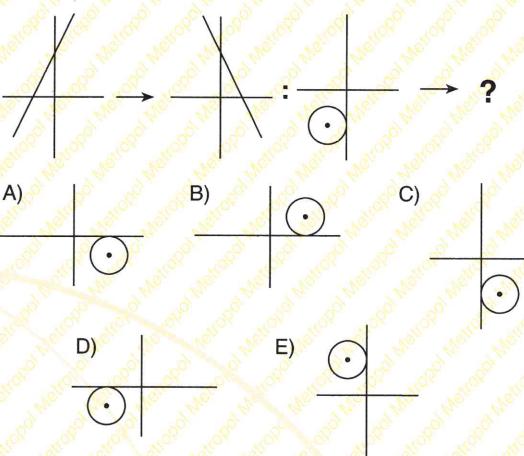
How many cubes are in the figure above?

- A) 30 B) 32 C) 34 D) 36 E) 38

7.

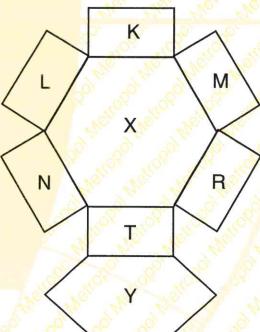


8.



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9.

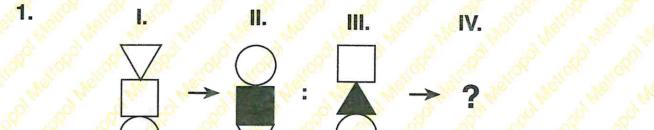
**Yukarıdaki şekli katlayıp kapalı hale getirdiğimizde, hangi kenarlar birbirine paralel olur?**

If we fold the given figure above, which sides are parallel to each other?

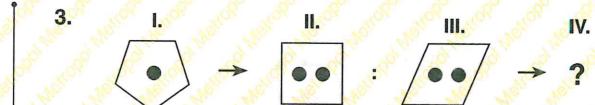
- A) K – R B) N – T C) M – L
D) R – L E) T – M

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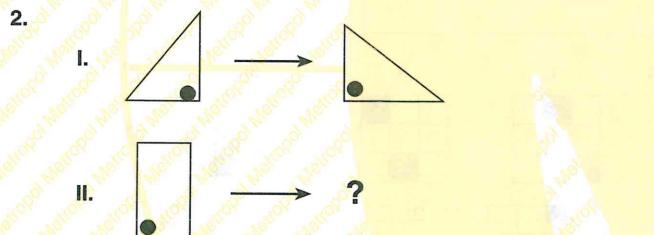
1	2	3	4	5	6	7	8	9
C	E	D	C	A	A	A	C	D



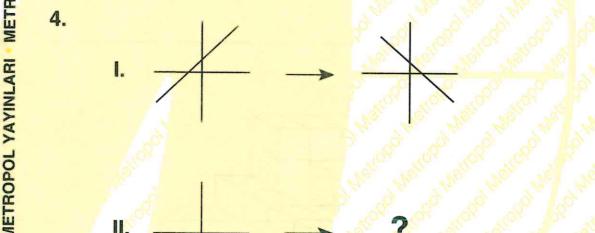
- A)
- B)
- C)
- D)
- E)



- A)
- B)
- C)
- D)
- E)



- A)
- B)
- C)
- D)
- E)

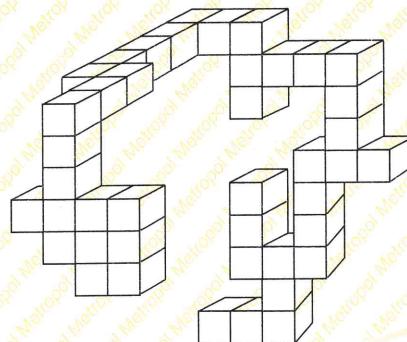


- A)
- B)
- C)
- D)
- E)

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Bölüm / Chapter 2

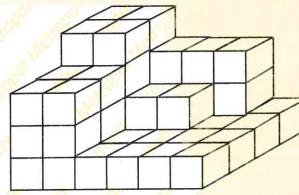
5.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

- A) 40 B) 41 C) 42 D) 43 E) 44

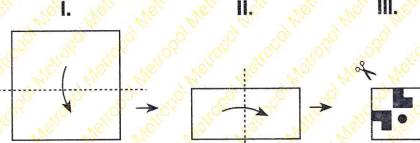
6.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are in the figure above?

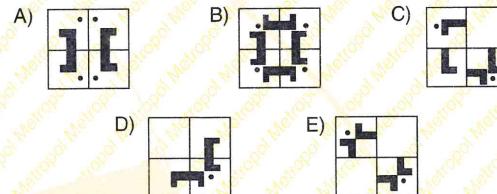
- A) 50
B) 52
C) 54
D) 56
E) 58

7.



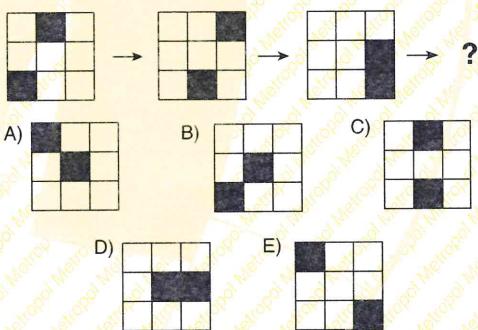
Yukarıdaki I nolu şekil her aşamada katlanarak III nolu şekil deki gibi kesiliyor. Bu şekil tekrar açıldığında aşağıdakilerden hangisi oluşur?

The first figure is folded in each case, at the end it is cut as in the figure and opened up. Which of the following is the last form of the first figure?



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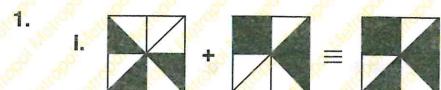
8.



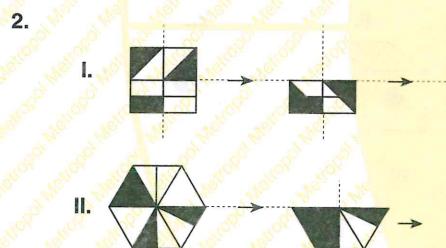
- A)
B)
C)
D)
E)

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	B	D	D	C	B	B	D



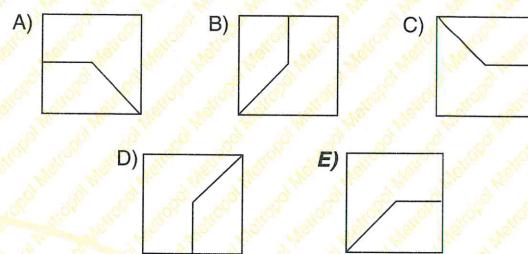
- A)
- B)
- C)
- D)
- E)



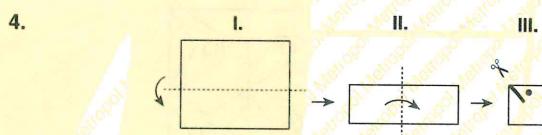
- A)
- B)
- C)
- D)
- E)

3. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?



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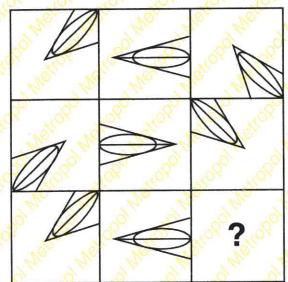


Yukarıdaki I nolu şekil her aşamada katlanarak III nolu şekildeki gibi kesiliyor. Bu şekil tekrar açıldığında aşağıdakilerden hangisi oluşur?

The first figure is folded in each case, at the end it is cut as in the figure and opened up. Which of the following is the last form of the first figure?

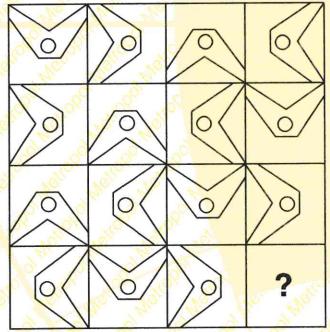
- A)
- B)
- C)
- D)
- E)

5.



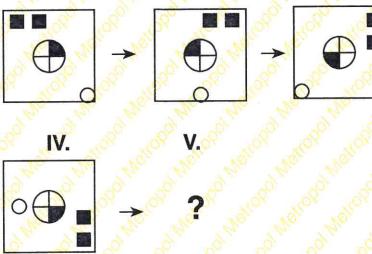
- A)
 B)
 C)
 D)
 E)

6.



- A)
 B)
 C)
 D)
 E)

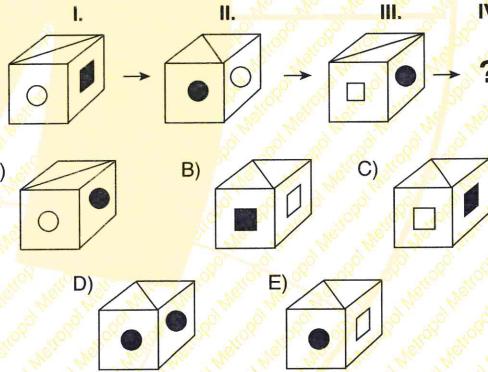
7.



- A)
 B)
 C)
 D)
 E)

METROPOL YAYINLARI • METROPOL PUBLICATIONS

8.



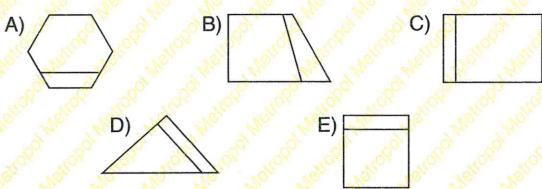
- A)
 B)
 C)
 D)
 E)

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	B	E	E	E	A	B	B

1. Aşağıdaki şekillerden hangisi diğerlerinden farklıdır?

Which of the following figure is different?

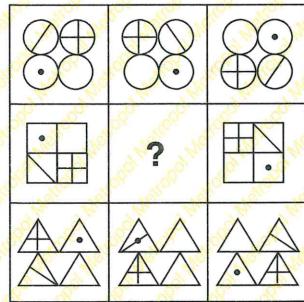


2.

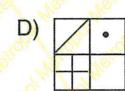
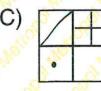
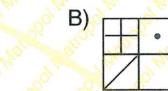


- A)
- B)
- C)
- D)
- E)

3.

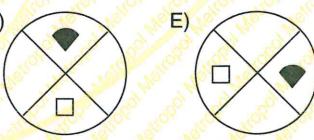
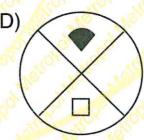
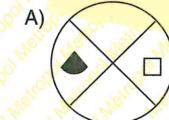
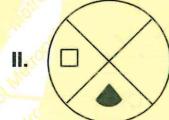
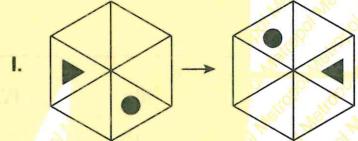


A)

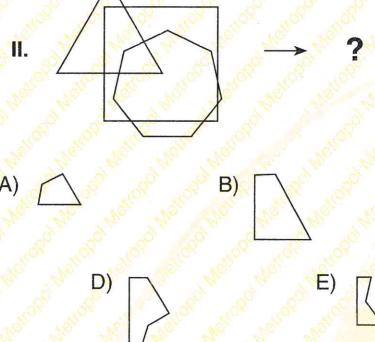
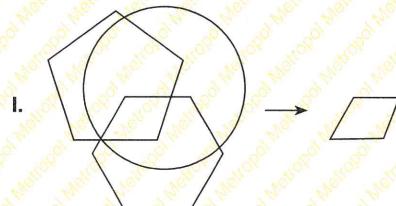


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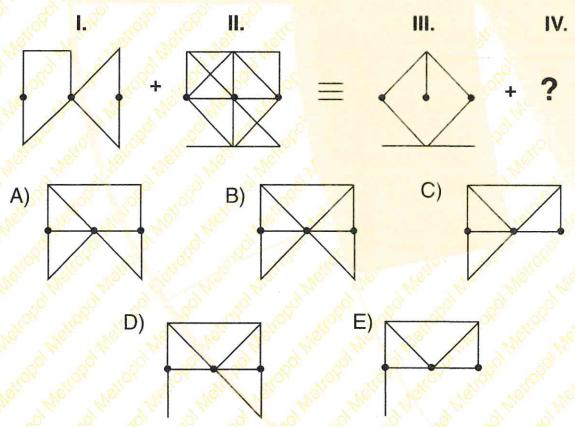
4.



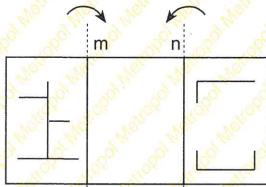
5.



6.



7.



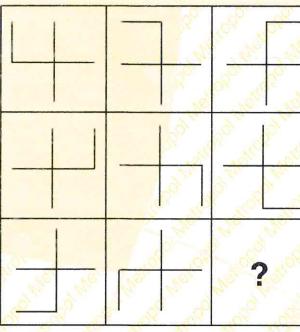
Yukarıdaki şekil m ve n eksenlerinden katlanırsa aşağıdaki şekillerden hangisi oluşur?

When we fold the figure above from m and n axis, which of the following figure stand for?

- A)
- B)
- C)
- D)
- E)

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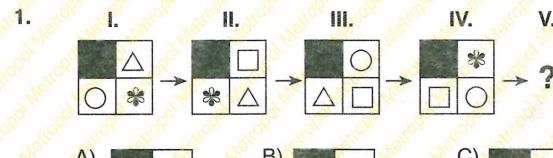
8.



- A)
- B)
- C)
- D)
- E)

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
B	C	C	C	A	B	E	A



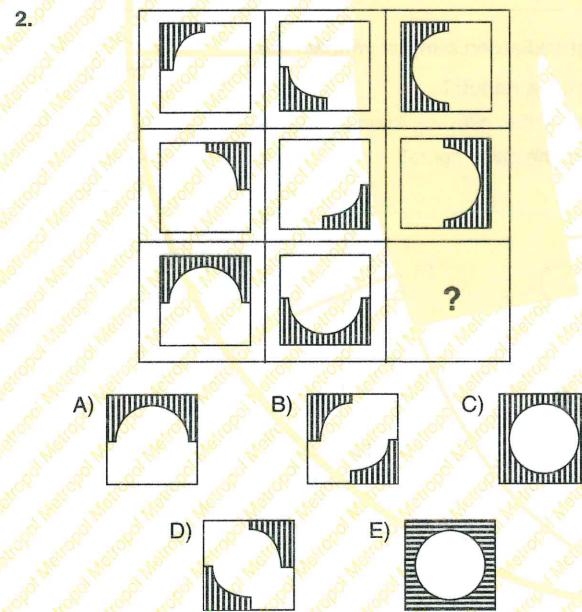
- A) B) C) D) E)

3.

\blacktriangle	\blacksquare	\bullet
2	4	K
0	L	2
M	0	2

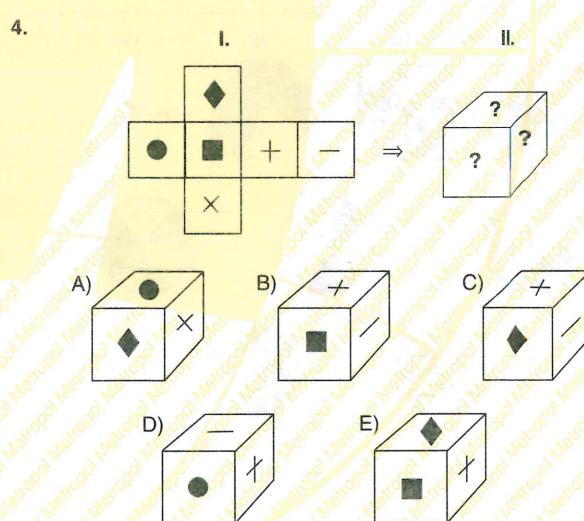
$\Rightarrow K = ?; L = ?; M = ?$

K	L	M
A) 5	0	5
B) 0	5	5
C) 5	5	0
D) 0	5	0
E) 5	0	0



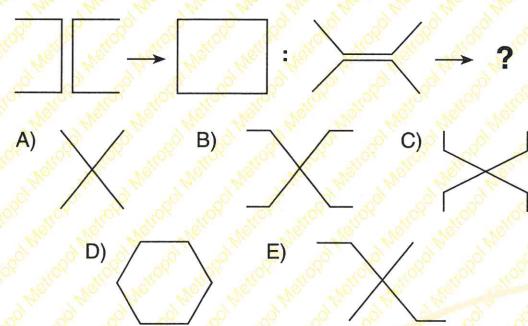
- A) B) C) D) E)

METROPOL YAYINLARI - METROPOL PUBLICATIONS



- A) B) C) D) E)

5.



A)



B)



C)



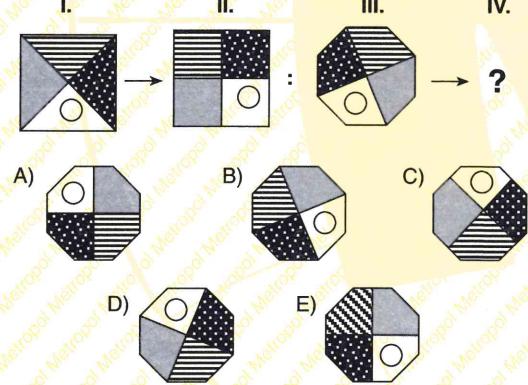
D)



E)



6.



A)



B)



C)



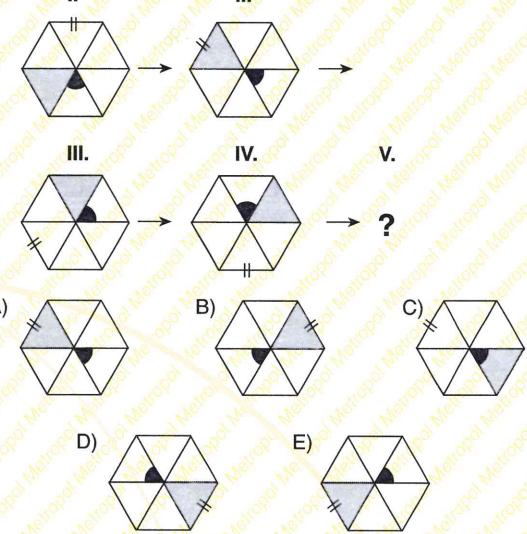
D)



E)



7.



A)



B)



C)



D)



E)



8. Aşağıdakilerden hangisi yandaki şe-

lin açılmış halidir?

Which of the following figure is opened form of the given figure?



A)



B)



C)



D)



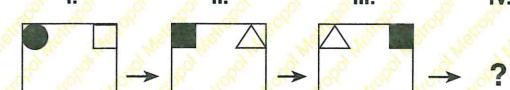
E)



YANITLAR / ANSWERS

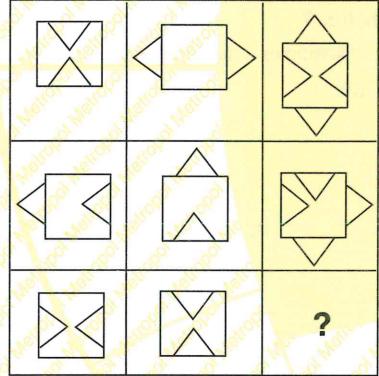
1	2	3	4	5	6	7	8
C	C	B	E	D	E	D	B

1.



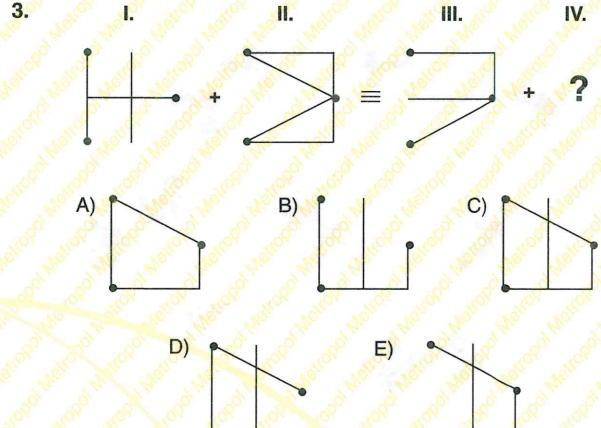
- A) B) C) D) E)

2.

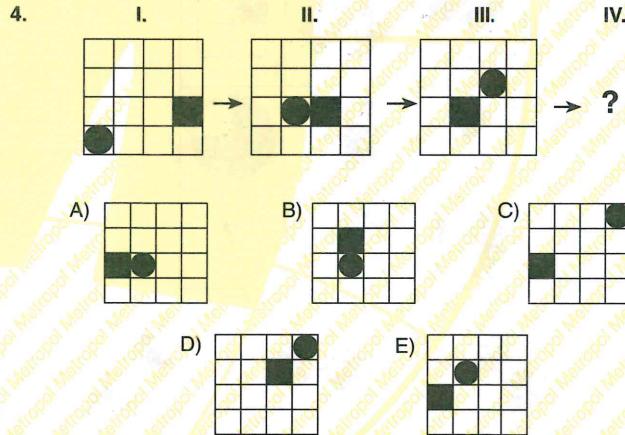


- A) B) C) D) E)

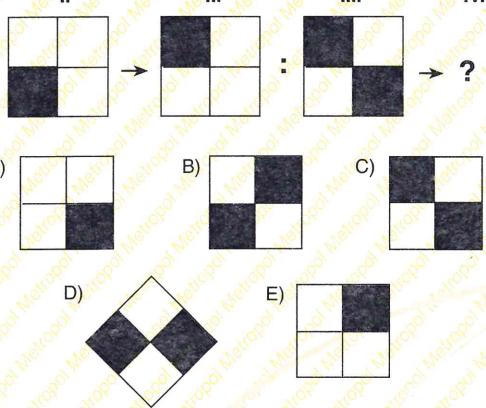
3.



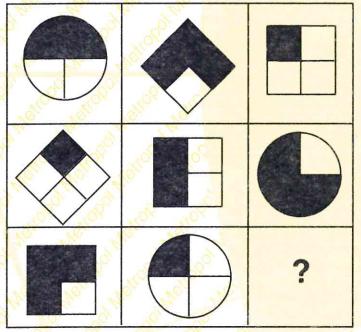
4.



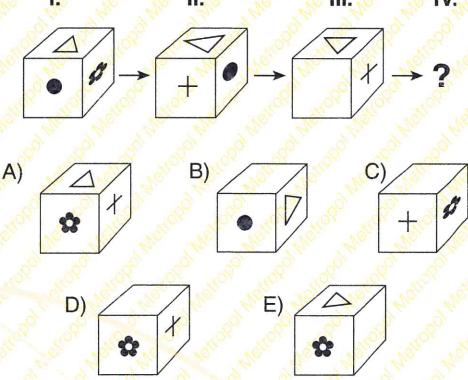
5.



6.

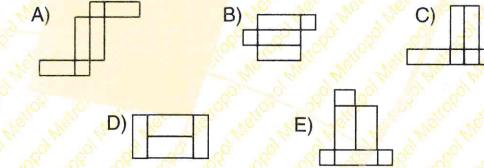


7.



8. Aşağıdakilerden hangisi yandaki şekeiten açık halidir?

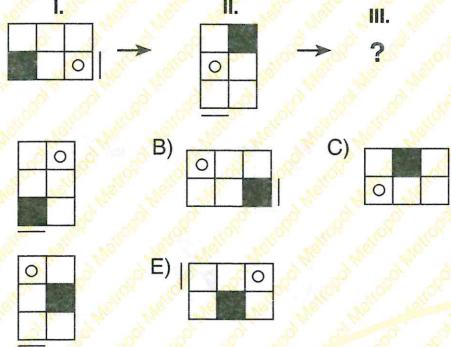
Which of the following is unfolded form of the given figure?



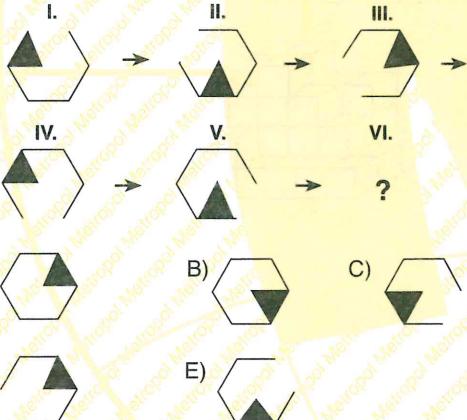
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
C	E	C	C	B	B	E	A

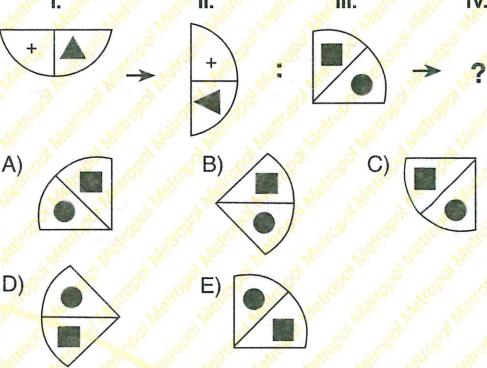
1.



2.

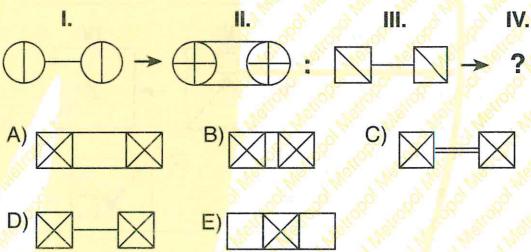


3.

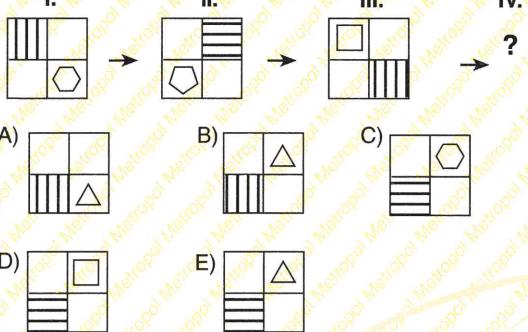


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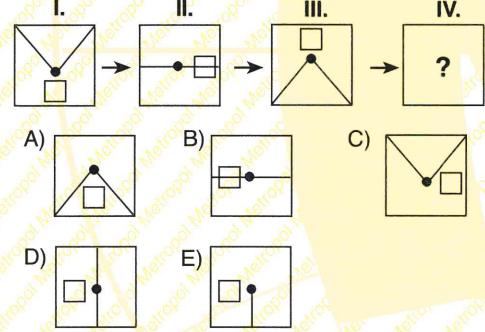
4.



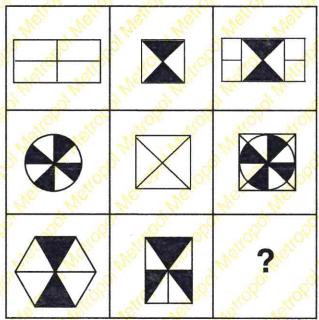
5.



6.

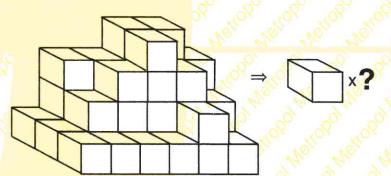


7.



- A) B) C)
 D) E)

8.



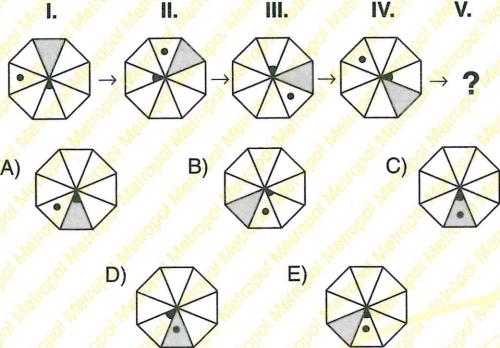
- A) 36
B) 38
C) 40
D) 42
E) 44



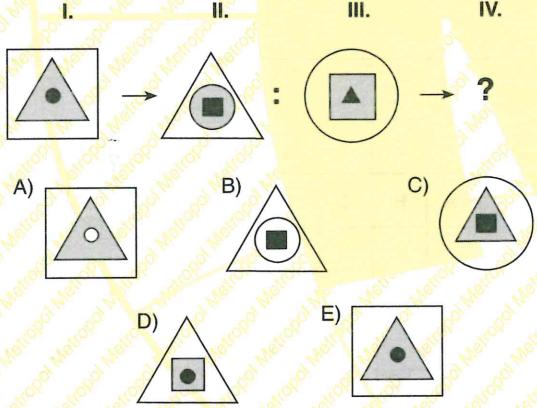
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	A	C	A	E	E	C	C

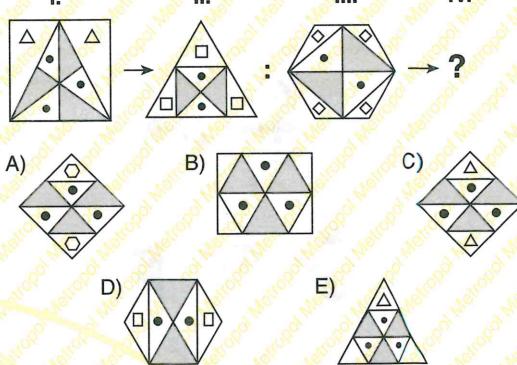
1.



2.

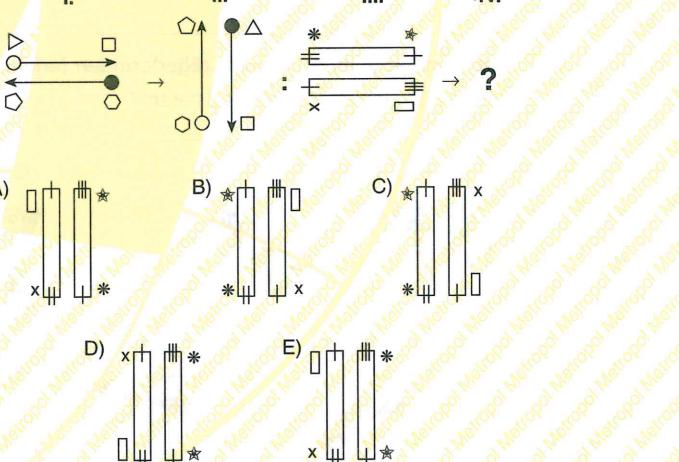


3.

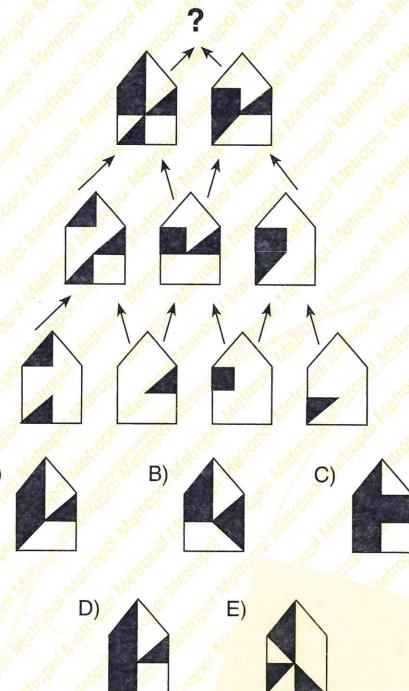


METROPOL PUBLICATIONS

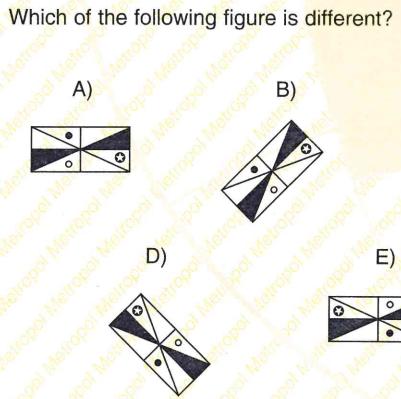
4.



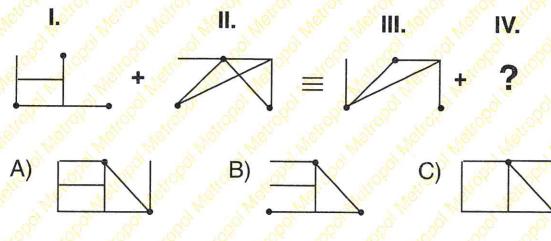
5.



6. Aşağıdakilerden hangisi diğerlerinden farklıdır?



7.



A)



B)



C)



D)



E)



D)

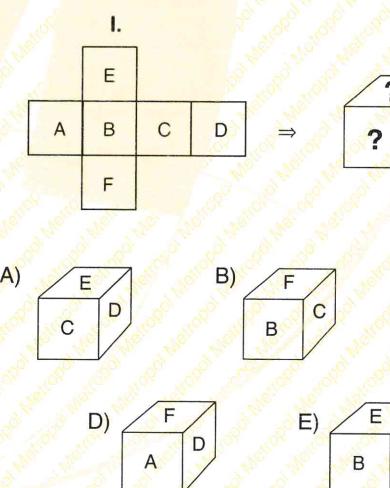


E)

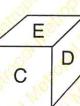


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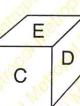
8.



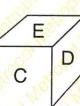
A)



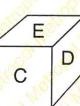
B)



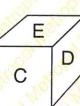
C)



D)



E)



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
C	E	A	D	D	C	B	C

BÖLÜM 03 CHAPTER

SAYI DİZİLERİ NUMBER SERIES

Bölüm / Chapter 3

Test 1

Sayı Dizileri / Number Series

1. 1, 6, 12, 17, ?, 24, 26

- A) 20
- B) 22
- C) 21
- D) 23
- E) 19

2. 2, 7, 17, 26, ?, 41, 47, 52

- A) 34
- B) 29
- C) 30
- D) 35
- E) 36

3. 3, 7, 14, 16, ?, 34, 68

- A) 30
- B) 32
- C) 36
- D) 38
- E) 28

4. 4, 21, 42, 43, ?, 86, 174

- A) 87
- B) 90
- C) 88
- D) 91
- E) 92

5. 5, 4, 12, 15, ?, 18, 6

- A) 12
- B) 20
- C) 16
- D) 14
- E) 15

6. I. 2, 4, 8, 16, ?, II. 3, 7, 13, 27, ?

- A) 32,32
- B) 46,46
- C) 48,26
- D) 32,53
- E) 62,54

7. **I** 13 27 25 51 ? **II** 7 14 13 26 25 ? **III** 99
- A) 48,51
B) 51,50
C) 49,50
D) 30,48
E) 62,7

8. **I** 2 6 9 13 17 **II** 3 11 17 25 ?
- A) 26
B) 29
C) 33
D) 35
E) 38

9. **I** 286 214 308 426 518 **II** 143 107 154 213 ? **III** 53 17 64 33 ?
- A) 259–79
B) 209–99
C) 238–58
D) 189–99
E) 259–89

10. **I** 7 20 59 176 ? **II** 3 15 53 169 ?
- A) 527,519
B) 316,305
C) 540,280
D) 516,504
E) 428,314

11. **I** 6 3 7 4 8 5 9 **II** 10 13 9 12 8 11 7 **III** 7 6 8 7 9 8 10 **IV** ?
- A) 11 10 12 11 13 12 14
B) 13 14 12 13 11 12 10
C) 12 10 13 11 14 12 15
D) 15 13 14 12 13 11 12
E) 7 10 6 9 5 8 4

12. **I** 6 2 5 1 6 **II** 10 2 7 1 8 **III** 129 43 40 8 3 **IV** ?
- A) -18 -2 -11 10 3
B) 225 45 40 8 3
C) 340 68 63 9 2
D) 65 13 7 1 8
E) 270 54 48 8 2

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
C	A	B	A	E	D	C	C	A	A	B	C

1. ? 1 2 1 3 1 4 1

- A) 1
B) 2
C) 3
D) 4
E) 5

2. ? 25 2 16 3 9 4 4 5 1

- A) 36
B) 29
C) 5
D) 6
E) 1

3. ? -45 -42 -21 -18 -9 -6 -3

- A) -50
B) -60
C) -72
D) -90
E) -105

4. 1 2 5 ? 677

- A) 11
B) 16
C) 19
D) 21
E) 26

5. 2 $\frac{4}{3}$ $\frac{2}{3}$? $-\frac{2}{3}$

- A) 0
B) $\frac{1}{3}$
C) $\frac{1}{6}$
D) $\frac{3}{5}$
E) $\frac{4}{3}$

6. 3 7 15 31 ? 127 255

- A) 42
B) 63
C) 84
D) 98
E) 107

7. $3 \quad 6 \quad ? \quad 18 \quad 21 \quad 42 \quad 45 \quad 90$
- A) 4
B) 5
C) 7
D) 8
E) 9

8. $\frac{1}{2} \quad 1 \quad \frac{1}{4} \quad \frac{1}{2} \quad ? \quad \frac{1}{4} \quad \frac{1}{16}$
- A) $\frac{1}{8}$
B) $\frac{1}{4}$
C) $\frac{1}{2}$
D) 1
E) 2

9. $3 \quad 80 \quad 18 \quad 40 \quad 9 \quad 20 \quad 54 \quad 10 \quad 27 \quad 5 \quad ? \quad ?$
- A) 142,3
B) 118,29
C) $162, 2\frac{1}{2}$
D) 72,33
E) 24,9

10. $1440 \quad 240 \quad 48 \quad 12 \quad ? \quad 2 \quad 2$
- A) 10
B) 9
C) 8
D) 4
E) 3

11. $4 \quad 9 \quad 17 \quad 35 \quad 69 \quad ? \quad 277$
- A) 102
B) 139
C) 143
D) 168
E) 173

12. $8 \quad 12 \quad 10 \quad 16 \quad 14 \quad ? \quad 20$
- A) 19
B) 22
C) 12
D) 21
E) 26

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	E	D	E	A	B	E	A	C	D	B	B

1. 3, 7, 10, 20, 24, 27, 54, ?

A) 51

B) 52

C) 53

D) 54

E) 58

2. 2, 4, 7, 12, 14, 17, 22, ?

A) 24

B) 25

C) 26

D) 27

E) 28

3. 3 7 16 35 ?

A) 72

132

D) 72

134

B) 62

136

C) 64

130

E) 74

138

4. 1, 9, $\sqrt{5}$, 49, 3, 121, ?

A) 144

B) $\sqrt{12}$ D) $\sqrt{11}$ D) $\sqrt{13}$ E) $\sqrt{15}$

5. 6, 6, 7, 7, 10, 9, 15, 12, 22, 16, ?, ?

A) 32,22

B) 29,21

C) 30,31

D) 21,31

E) 31,21

6. 1 2 2 4 8 32 ?

A) 48

B) 64

C) 96

D) 128

E) 256

7. 12, 22, 23, 33, 34, 44, ?

- A) 55
B) 43
C) 88
D) 45
E) 35

8. 16, 62, 27, 73, 38, ?

- A) 83
B) 84
C) 88
D) 81
E) 79

9. 15, 53, 37, 75, 59, ?

- A) 87
B) 95
C) 98
D) 94
E) 97

10. 3 6 7 ? 15 30

- A) 12
B) 13
C) 10
D) 14
E) 11

11. 54 45 36 ? 18 9

- A) 30
B) 35
C) 27
D) 25
E) 28

12. 2 5 9 ? 20 27 35

- A) 14
B) 11
C) 12
D) 16
E) 15


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	A	E	D	E	E	D	B	E	D	C	A

1.	3	6	15	45
5	10	27	81	
4	8	21	63	
6	12	?	99	

A) 33

B) 22

C) 11

D) 9

E) 4

2.	1	1	2	3	5	?	13
----	---	---	---	---	---	---	----

A) 7

B) 8

C) 9

D) 10

E) 11

3.	2	3	8	31	?	923
----	---	---	---	----	---	-----

A) 150

B) 152

C) 154

D) 156

E) 158

4.	5	3	9	7	?	11
----	---	---	---	---	---	----

A) 13

B) 15

C) 21

D) 20

E) 25

5.	1	2	6	24	120	?
----	---	---	---	----	-----	---

A) 180

B) 720

C) 1010

D) 940

E) 1240

6.	3	7	12	18	25	?
----	---	---	----	----	----	---

A) 28

B) 31

C) 33

D) 35

E) 39

7. 4 5 7 10 14 19 ?
- A) 25
B) 24
C) 23
D) 22
E) 21
-
8. 2 3 6 7 14 ? ?
- A) 20 – 21
B) 16 – 18
C) 15 – 16
D) 21 – 30
E) 15 – 30
-
9. I. 3 6 8 16 18
II. 1 3 6 8 16
III. 4 16 12 48 44
IV. ?
A) 3 9 12 36 39
B) 1 4 8 32 36
C) 2 10 15 75 80
D) 4 20 15 75 70
E) 6 2 8 4 16

10. 7 5 12 18
17 15 32 48
14 12 26 39
4 6 10 ?
A) 14
B) 15
C) 16
D) 17
E) 18
-
11. 3 6 15 42
5 12 33 96
2 3 6 15
6 15 42 ?
A) 72
B) 96
C) 106
D) 123
E) 142
-
12. 3 – 9 – 8 – 24 – 23 – ?
A) 32
B) 45
C) 51
D) 59
E) 69

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 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	B	C	A	B	C	A	E	E	D	D	E

1. $-6 \quad 2 \quad -\frac{2}{3} \quad \frac{2}{9} \quad ? \quad \frac{2}{81}$

- A) $-\frac{2}{27}$
 B) $-\frac{4}{9}$
 C) $-\frac{2}{9}$
 D) $-\frac{4}{27}$
 E) $\frac{3}{13}$

2. $6 \quad 9 \quad 18 \quad 16 \quad 19 \quad 38 \quad 36 \quad ?$

- A) 36
 B) 38
 C) 39
 D) 48
 E) 61

3. $7 \quad 14 \quad 11 \quad 16 \quad 15 \quad ?$

- A) 14
 B) 17
 C) 10
 D) 23
 E) 18

4. $4 \quad 5 \quad ? \quad 7 \quad 7 \quad 14 \quad 11 \quad 16 \quad 15 \quad ?$

- A) 32,4
 B) 3,32
 C) 13,5
 D) 32,7
 E) 3,8

5. $4 \quad 9 \quad 9 \quad 6 \quad ? \quad 3 \quad 16 \quad 0 \quad 18 \quad ? \quad 19$

- A) 4,5
 B) 12,5
 C) 13,-3
 D) 14,2
 E) 15,-2

6. $1 \quad 2 \quad 3 \quad 5 \quad 5 \quad 14 \quad 7 \quad 41 \quad 9 \quad 122 \quad 11 \quad ? \quad ?$

- A) 184,12
 B) 249, 13
 C) 365,13
 D) 364,13
 E) 247, 10

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7. 1 2 3 5 8 13 ?

- A) 33
B) 22
C) 21
D) 18
E) 16

8. 5 10 6 12 9 18 16 32 ?

- A) 20
B) 26
C) 31
D) 64
E) 68

9. 720 120 24 ? 2 1

- A) 4
B) 5
C) 6
D) 8
E) 12

10. 8 12 18 27 ?

- A) 48,5
B) 46
C) 44,5
D) 42
E) 40,5

11. $\left(\frac{1}{2}-1\right)\left(\frac{1}{3}-1\right)\left(\frac{1}{4}-1\right)\dots\left(\frac{1}{10}-1\right)=?$

- A) $\frac{1}{10}$
B) $-\frac{1}{10}$
C) $\frac{9}{2}$
D) $-\frac{9}{2}$
E) $\frac{9}{40}$

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12. 50 51 49 53 47 56 44 60 40 ? ?

- A) 60, 40
B) 35, 60
C) 60, 35
D) 65, 35
E) 65, 42



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	E	B	C	C	C	C	C	E	B	D

1. 2 5 13 36
3 8 ? 63
1 2 4 9
4 11 31 90
A) 32
B) 29
C) 20
D) 22
E) 18

2. 27 11 30 20
30 12 33 23
? 16 45 35
9 5 12 2
A) 56
B) 48
C) 42
D) 28
E) 22

3. 25 5 8 12
30 6 9 13
45 ? 16
35 7 10 14
A) 7 – 5
B) 9 – 12
C) 15 – 18
D) 5 – 8
E) 10 – 12

4. 12, 18, 30, 54, 102, ?
A) 190
B) 192
C) 194
D) 196
E) 198

5. 9, 18, ?, 12, 24, 30, 15
A) 20
B) 21
C) 22
D) 23
E) 24

6. ?, 50, 42, 23, 40, 32, 13, 30, 22, 3
A) 33
B) 34
C) 35
D) 36
E) 37

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7. 2, 4, 11, 3, 9, 16, 8, ?, 71, 63
 A) 63
 B) 64
 C) 65
 D) 66
 E) 67

8. 11, 22, 35, ?, 67, 86, 107
 A) 48
 B) 50
 C) 51
 D) 52
 E) 53

9. 523, 651, 329, ?
 A) 215
 B) 321
 C) 456
 D) 591
 E) 655

10. 15, 29, 57, 113, ?
 A) 221
 B) 222
 C) 223
 D) 224
 E) 225

11. 5, 3, 8, 16, 32, ?
 A) 32
 B) 48
 C) 56
 D) 64
 E) 72

12. 2, 3, 6, ?, 108, 1994
 A) 14
 B) 16
 C) 18
 D) 20
 E) 22

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	E	E	A	B	B	E	E	D	C

1. 50 2 48 4 46 6 44 ? ?
 A) 8, 46
 B) 8, 42
 C) 42, 10
 D) 44, 12
 E) 46, 8

2. 2 8 3 7 5 6 8 5 ? ?
 A) 10, 6
 B) 11, 3
 C) 11, 4
 D) 12, 4
 E) 12, 6

3.

x	Metropol	Metropol	y	Metropol	Metropol	z
100	74	65	89	79	70	62
20	?	?	56	47	47	?
60	?	?	56	47	47	?
12	?	?	56	47	47	?
?	?	?	?	?	?	?

 A) 48–38–58
 B) 26–38–55
 C) 24–38–55
 D) 36–39–45
 E) 36–38–55

4.

A	B	C	D
3	7	8	5
5	3	7	8
8	5	3	7
7	?	?	?

 A) 9, 6, 4
 B) 7, 5, 6
 C) 8, 6, 3
 D) 8, 5, 3
 E) 3, 5, 8

5.

A	B	
(I)	72	41
(II)	54	31
(III)	18	12
(IV)	24	?

 A) 14
 B) 16
 C) 18
 D) 20
 E) 22

6.

I	II	III	IV
121	64	810	312
8	20	18	?

 A) 10
 B) 12
 C) 14
 D) 16
 E) 18

7. 1 10 3 12 6 15 10 19 15 24 (?) (?)

- A) 28 ve(and) 25
- B) 15 ve(and) 29
- C) 15 ve(and) 28
- D) 21 ve(and) 30
- E) 21 ve(and) 36

8. $\frac{2}{5}$ $\frac{6}{5}$ $4\frac{1}{5}$ $16\frac{4}{5}$ $20\frac{4}{5}$ 104 ?

- A) 100
- B) 109
- C) 102
- D) 110
- E) 108

9. 21 30 41 54 69 ?

- A) 82
- B) 85
- C) 86
- D) 87
- E) 88

10. 2 4 10 28 82 ?

- A) 244
- B) 240
- C) 248
- D) 250
- E) 242

11. $\frac{3}{5}$ $2\frac{2}{5}$ $3\frac{2}{5}$ $13\frac{3}{5}$ $14\frac{3}{5}$?

- A) $24\frac{4}{5}$
- B) $36\frac{2}{5}$
- C) $56\frac{3}{5}$
- D) $58\frac{2}{5}$
- E) 70

12. $\frac{3}{4}$ $1\frac{1}{2}$ $3\frac{1}{2}$ $10\frac{1}{2}$ $13\frac{1}{2}$?

- A) 26
- B) $26\frac{1}{4}$
- C) 54
- D) $56\frac{1}{2}$
- E) 70

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	D	E	D	A	B	D	B	C	A	D	C

1. 10 – 3 – 14 – 7 – ? – 11 – 22

- A) 18
- B) 15
- C) 13
- D) 10
- E) 7

2. Aşağıdaki ikililerden hangisi diğerlerinden farklı bir özellik taşır?

Which number system below is different from the others?

- A) 81 – 9
- B) 100 – 10
- C) 9 – 3
- D) 30 – 10
- E) 25 – 5

3. I. 2 – 4 – 6 – 12 – 14

II. 3 – 9 – 12 – 36 – 39

III. 4 – 16 – 20 – 80 – 84

IV. ?

- A) 2 – 12 – 18 – 108 – 114
- B) 3 – 12 – 16 – 64 – 68
- C) 1 – 6 – 5 – 30 – 29
- D) 4 – 8 – 16 – 32 – 69
- E) 1 – 5 – 10 – 50 – 55

4. 1 – 4 – 9 – 16 – 25 – ?

- A) 28
- B) 36
- C) 49
- D) 56
- E) 64

5. I. 2 3 5 8 12

II. 21 20 18 15 11

III. 3 5 9 15 23

IV. ?

- A) 41 38 35 29 26
- B) 8 11 15 20 26
- C) 30 28 24 18 10
- D) 2 7 13 20 28
- E) 24 23 22 19 15

6. I. 2 3 5 8 12

II. 21 20 18 15 11

III. 13 15 18 22 27

IV. ?

- A) 1 4 2 8 6
- B) 3 12 16 64 68
- C) 1 6 5 30 29
- D) 4 8 16 32 64
- E) 40 38 35 31 26

7.	I.	2	6	4	12	10
	II.	1	5	2	10	7
	III.	3	6	5	10	9
	IV.	?				
	A)	5	13	12	20	19
	B)	3	10	7	14	11
	C)	4	16	14	56	54
	D)	6	5	20	19	76
	E)	7	11	17	25	35

8.	I.	2	4	6	8	10
	II.	7	11	15	19	23
	III.	20	18	16	14	12
	IV.	?				
	A)	15	13	11	9	7
	B)	8	11	14	17	20
	C)	4	6	8	10	12
	D)	7	10	14	19	25
	E)	18	14	10	6	2

- 9.** 12 – 7 – 16 – 11 – 20 – 15 – ?
A) 24
B) 23
C) 22
D) 21
E) 20

- 10.** 2 – 3 – 6 – 7 – 10 – ? – ? – ?
A) 11 – 14 – 17
B) 11 – 14 – 15
C) 9 – 8 – 7
D) 12 – 15 – 19
E) 13 – 14 – 17

- 11.** 8 – 21 – 16 – 12
10 – 27 – 22 – 18
? – 30 – 25 – 21
13 – 36 – 31 – 27
A) 15
B) 13
C) 11
D) 9
E) 7

- 12.** 1 – 5 – 2 – 6
3 – 15 – 12 – 36
4 – 20 – 17 – 51
6 – ? – 27 – ?
A) 24 – 72
B) 12 – 64
C) 49 – 81
D) 16 – 72
E) 30 – 81

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 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	D	E	B	C	E	C	E	A	B	C	E

1. I. 5, 10, 20, 40
 II. 17, 13, 9, 5
 III. 7, 21, 63, 189
 IV. 40, 36, 32, 28
 V. 28, 21, 14, 7

Yukarıda verilen sayı sistemleri arasında birbirini takip eden bir sıralama vardır. Bu sıralama aşağıdakilerden hangisinde doğru olarak verilmiştir?

There is a number system between the number series above.

Which of the following is the system shown correctly?

- A) I, IV, V, II, III B) I, II, III, IV, V C) II, III, IV, I, II
 D) II, IV, V, III, I E) II, I, IV, V, III

2. I. 19, 17, 15
 II. 25, 30, 35
 III. 10, 20, 40
 IV. 64, 16, 4
 V. 18, 20, 22

Yukarıda verilen sayı sistemlerinden hangi üç tanesinde aynı sayıyla farklı işlemler yapılmıştır?

Between the number systems above, in three number system the same number but different operations are using. Which are these number series?

- A) I, III, IV B) I, III, II C) II, III, V
 D) I, II, III E) I, III, V

3. I. 7, 12, 8, 24, 12
 II. 8, 13, 9, 18, 6
 III. 3, 8, 4, 12, 6
 IV. 6, 11, 6, 12, 4
 V. 19, 24, 20, 60, 30

Yukarıda verilen sayı sistemlerinden hangi üç tanesi aynı kurala göre dizilmiştir?

Between the number systems above, which series are sharing the same rule?

- A) I, II, III B) I, III, IV C) I, III, V
 D) I, II, V E) I, IV, V

4. I. 6, 9, 12, 6, 3
 II. 12, 16, 20, 10, 5
 III. 38, 43, 48, 12, 3
 IV. 4, 11, 18, 6, 2
 V. 22, 29, 36, 6, 1

Yukarıda verilen sayı sistemlerinden hangi üç tanesi benzer kurala göre dizilmiştir?

Between the number systems above, which series are sharing the similiar rule?

- A) I, II, III B) I, II, V C) I, III, V
 D) I, IV, V E) I, II, IV

Aşağıdaki sayı sistemlerinden hangisi diğerlerinden farklı bir özellik taşır? (14. soruya kadar olan soruları bu soruya göre cevaplayınız)

Which of the following number systems are different from the others in one way? (Do the questions 5. to 14. in this explanation)

5. A) 14, 16, 18, 20
 B) 18, 20, 22, 24
 C) 13, 15, 17, 19
 D) 20, 22, 24, 26
 E) 30, 32, 34, 38

6. A) 2, 5, 7, 10
 B) 10, 13, 15, 18
 C) 20, 23, 25, 28
 D) 17, 19, 22, 24
 E) 50, 53, 55, 58

7. A) 2, 7, 21, 20
 B) 7, 12, 36, 35
 C) 20, 25, 75, 74
 D) 90, 95, 285, 284
 E) 1, 6, 18, 19

8. A) 7, 10, 15, 22, 29
 B) 7, 16, 5, 18, 3
 C) 7, 12, 5, 14, 3
 D) 7, 14, 5, 16, 3
 E) 7, 8, 5, 10, 3

9. A) 10 13 18 25 34
 B) 10 11 14 19 26
 C) 20 25 32 41 52
 D) 30 37 46 57 70
 E) 12 9 12 4 12

10. A) 20 10 8 10 20
 B) 7 10 30 27 9
 C) 6 10 40 36 9
 D) 30 25 125 120 600
 E) 12 9 12 4 12

11. A) 8 16 24 32 40
 B) 126 132 138 144 150
 C) 901 909 917 925 933
 D) 2 10 18 26 34
 E) 134 142 150 158 166

12. A) 2 5 10 17 26
 B) 2 3 6 11 18
 C) 2 10 20 32 46
 D) 2 23 46 71 98
 E) 2 17 34 53 74

13. A) 1 8 25 52 89
 B) 1 4 17 40 73
 C) 1 6 21 46 81
 D) 1 3 25 67 129
 E) 1 2 13 34 65

14. A) 119 110 102 95 86 78
 B) 2 2 4 12 12 24
 C) 1 2 6 24 48 144
 D) 10 18 27 37 45 53
 E) 120 115 109 102 97 91

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12	13	14
E	E	C	C	E	D	E	A	E	D	B	C	D	D

1. (I) 3, 5, 9, 15, 23, 33

(II) 42, 40, 36, 30, 22, 12

(III) 32, 35, 41, 50, 62, 77

(IV) ?

A) 18, 20, 24, 30, 38, 48

B) 18, 21, 27, 36, 48, 63

C) 51, 48, 42, 33, 21, 6

D) 6, 8, 24, 26, 78, 80

E) 12, 17, 15, 20, 18, 23

2. (I) 279, 93, 90, 30, 27, 9

(II) 848, 212, 208, 52, 48, 12

(III) 4, 12, 15, 45, 48, 144

(IV) ?

A) 6, 12, 14, 28, 30, 60

B) 2, 10, 15, 75, 80, 400

C) 36, 18, 20, 10, 12, 6

D) 5, 20, 10, 40, 20, 80, 20

E) 3, 12, 16, 64, 68, 272

3. (I) 2, 3, 4, 5, 6

(II) 7, 10, 13, 16, 19

(III) 95, 90, 85, 80, 75

(IV) ?

A) 7, 12, 22, 27, 37

B) 90, 97, 104, 111, 118

C) 90, 95, 100, 105, 110

D) 87, 80, 73, 66, 59

E) 5, 12, 19, 26, 33

4. (I) 0, 10, 2, 8, 4

(II) 20, 24, 18, 26, 16

(III) 100, 120, 102, 118, 104

(IV) ?

A) 120, 134, 118, 136, 116

B) 120, 106, 122, 104, 124

C) 120, 140, 122, 138, 124

D) 120, 100, 118, 102, 116

E) 120, 90, 80, 70, 60

5. (I) 110 114 118 110 102

(II) 12 36 108 18 3

(III) 8 6 4 8 12

(IV) ?

A) 16 8 4 24 144

B) 4 4 4 2 1

C) 8 8 8 16 32

D) 64 16 4 32 256

E) 4 8 16 8 4

6. (I) 2 9 8 15 14 21 20

(II) 35 28 29 22 23 16 17

(III) 20 16 18 14 16 12 14

(IV) ?

A) 18 14 21 20 15 18 5

B) 12 14 11 13 7 12 8

C) 28 16 18 14 16 12 14

D) 35 12 13 24 11 12 16

E) 10 14 12 16 14 18 16

7.	I	II	III	IV
	37	51	62	44
	68	102	123	?

- A) 85
B) 86
C) 87
D) 88
E) 89

8.	I	II	III	IV
	31	42	67	88
	5	7	14	?

- A) 16
B) 21
C) 15
D) 14
E) 17

9.	I	II	III	IV
	12	32	26	14
	37	97	79	?

- A) 40
B) 41
C) 42
D) 43
E) 44

10.	I	II	III	IV	V
	25	25	22	23	19
	25	25	21	?	?
	25	23	19	21	?
	25	23	19	21	?

- A) 16
B) 17
C) 21
D) 22
E) 24

11.	$\frac{1}{2}$	$\frac{3}{2}$	$\frac{3}{4}$	$\frac{7}{4}$	1	2	?
-----	---------------	---------------	---------------	---------------	---	---	---

- A) $\frac{5}{4}$
B) $\frac{7}{2}$
C) $\frac{15}{4}$
D) $\frac{11}{8}$
E) 1

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12.	I	II	III	IV	V
	0	2	8	18	?
	0	2	8	18	50
	0	2	8	18	72
	0	2	8	18	?

- A) 22
B) 28
C) 32
D) 36
E) 48

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	E	D	A	C	E	A	E	D	A	A	C

1. (I) 4, 10, 22, 46, 94, 190
 (II) 3, 4, 6, 10, 18, 34
 (III) 2, 9, 30, 93, 282, 849
 (IV) ?
 A) 1, 2, 6, 24, 120, 720
 B) 5, 8, 14, 26, 50, 98
 C) 4, 9, 24, 69, 204, 609
 D) 18, 21, 27, 36, 48, 63
 E) 8, 10, 14, 20, 28, 38

2. (I) 3, 12, 6, 24, 12, 48
 (II) 6, 10, 8, 12, 10, 14
 (III) 128, 256, 64, 128, 32
 (IV) ?
 A) 10, 20, 30, 60, 70, 140
 B) 2, 6, 12, 36, 72, 216
 C) 5, 10, 30, 60, 180, 360
 D) 40, 42, 38, 40, 36, 38
 E) 18, 21, 19, 22, 20, 23

3. (I) 12, 15, 13, 16, 14, 17
 (II) 4, 12, 6, 18, 9, 27
 (III) 12, 14, 11, 13, 10, 12
 (IV) ?
 A) 45, 90, 30, 60, 20, 40
 B) 12, 36, 18, 54, 27, 81
 C) 15, 18, 16, 19, 17, 20
 D) 2, 8, 4, 16, 8, 32
 E) 4, 8, 10, 20, 22, 24

4. (I) 6, 9, 18, 21, 42, 45
 (II) 77, 74, 37, 34, 17, 14
 (III) 2, 4, 12, 14, 42, 44
 (IV) ?
 A) 5, 10, 12, 24, 26, 52
 B) 80, 78, 26, 24, 8, 6
 C) 45, 42, 21, 18, 9, 6
 D) 4, 12, 14, 42, 44, 132
 E) 80, 78, 75, 73, 70, 68

5. (I) 2, 6, 7, 21, 22, 66
 (II) 4, 12, 11, 33, 32, 96
 (III) 6, 12, 14, 28, 30, 60
 (IV) ?
 A) 3, 6, 12, 24, 48, 96
 B) 3, 6, 9, 12, 15, 18
 C) 4, 12, 14, 42, 44, 132
 D) 8, 16, 18, 36, 38, 76
 E) 4, 8, 6, 12, 10, 20

6. (I) 4, 5, 15, 16, 48, 49
 (II) 4, 12, 13, 39, 40, 120
 (III) 4, 2, 10, 8, 40, 38
 (IV) ?
 A) 4, 20, 18, 90, 88, 440
 B) 4, 6, 30, 32, 160, 162
 C) 4, 8, 13, 26, 31, 62
 D) 4, 9, 18, 23, 46, 51
 E) 4, 12, 14, 42, 44, 162

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7. (I) 6, 4, 12, 10, 30, 28
 (II) 6, 18, 16, 48, 46, 138
 (III) 6, 12, 19, 38, 45, 90

(IV) ?

- A) 6, 42, 44, 308, 310, 2170
 B) 6, 12, 24, 31, 62, 124
 C) 6, 13, 26, 33, 66, 73
 D) 6, 8, 56, 58, 406, 408
 E) 6, 8, 10, 70, 72, 74

8. (I) 82, 77, 67, 52, 32, 7
 (II) 22, 27, 37, 52, 72, 97
 (III) 48, 46, 42, 36, 28, 18

(IV) ?

- A) 52, 49, 43, 34, 22, 7
 B) 15, 18, 24, 33, 45, 60
 C) 56, 54, 50, 44, 36, 26
 D) 4, 6, 10, 16, 24, 34
 E) 12, 16, 20, 24, 28, 32

9. (I) 36, 33, 30, 27, 24, 21
 (II) 5, 8, 11, 14, 17, 20
 (III) 47, 42, 37, 32, 27, 22

(IV) ?

- A) 18, 23, 28, 33, 38, 43
 B) 13, 16, 19, 22, 25, 28
 C) 21, 18, 15, 12, 9, 6
 D) 4, 9, 6, 11, 8, 13
 E) 20, 15, 18, 13, 16, 11

10. (I) 35, 32, 29, 26, 23, 20
 (II) 13, 16, 19, 22, 25, 28
 (III) 68, 61, 54, 47, 40, 33

(IV) ?

- A) 68, 65, 62, 59, 56, 53
 B) 72, 65, 58, 51, 44, 47
 C) 18, 21, 24, 27, 30, 33
 D) 18, 25, 32, 39, 46, 53
 E) 26, 19, 22, 15, 18, 11

11. (I) 3, 9, 10, 30, 31, 93
 (II) 3, 9, 8, 24, 23, 69
 (III) 3, 9, 12, 36, 39, 117

(IV) ?

- A) 3, 9, 27, 24, 21, 63
 B) 3, 6, 9, 12, 15, 18
 C) 3, 9, 6, 18, 15, 45
 D) 3, 6, 18, 21, 63, 66
 E) 3, 6, 9, 27, 81, 84

12. (I) 2, 4, 8, 16
 (II) 6, 12, 24, 48
 (III) 3, 9, 27, 81

(IV) ?

- A) 5, 10, 20, 40
 B) 4, 12, 36, 108
 C) 7, 14, 28, 46
 D) 5, 7, 9, 11
 E) 7, 21, 36, 52

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	D	A	B	E	A	C	D	A	D	C	B

1. (I) 171, 57, 54, 18, 15, 5, 2
 (II) 12, 6, 8, 4, 6, 3, 5
 (III) 3, 12, 16, 64, 68, 272, 276

IV. ?

- A) 3, 12, 8, 28, 112, 108
 B) 3, 9, 6, 18, 15, 45, 42
 C) 3, 7, 11, 15, 19, 23, 27
 D) 3, 9, 12, 36, 39, 117, 120
 E) 3, 12, 6, 24, 12, 48, 24

2. (I) 5, 3, 9, 7, 21, 19
 (II) 5, 15, 13, 39, 37, 111
 (III) 5, 10, 17, 34, 41, 82

IV. ?

- A) 5, 35, 37, 259, 261, 268
 B) 5, 7, 49, 51, 357, 359
 C) 5, 12, 24, 31, 62, 69
 D) 5, 10, 20, 27, 34, 68
 E) 5, 7, 9, 63, 441, 443

3. (I) 2, 4, 6, 12, 14
 (II) 100, 50, 48, 24, 22
 (III) 27, 9, 6, 2, -1

IV. ?

- A) 4, 12, 15, 45, 48, 144, 147
 B) 4, 2, 4, 2, 4, 2, 4
 C) 4, 1, 3, 0, 0, -3, -9
 D) 4, 16, 20, 80, 76, 304, 308
 E) 4, 12, 9, 27, 72, 69

4. (I) 2, 3, 5, 8, 12, 17, 23

- (II) 40, 39, 37, 34, 30, 25, 19

- (III) 3, 5, 9, 15, 23, 33, 45

(IV) ?

- A) 60, 58, 56, 52, 50, 48
 B) 60, 59, 58, 57, 56, 55, 54
 C) 60, 58, 54, 48, 40, 30, 18
 D) 60, 59, 57, 54, 50, 45, 39
 E) 60, 57, 51, 42, 30, 16, 0

5. (I) 2, 3, 9, 10, 30, 31

- (II) 2, 6, 7, 21, 22, 66

- (III) 2, 10, 12, 60, 62, 310

(IV) ?

- A) 2, 4, 20, 22, 110, 112
 B) 2, 7, 17, 19, 38, 43
 C) 2, 4, 6, 30, 150, 152
 D) 2, 10, 50, 52, 54, 270
 E) 2, 7, 12, 24, 48, 96

6. (I) 30, 35, 33, 38, 36, 41

- (II) 30, 25, 27, 22, 24, 19

- (III) 30, 37, 34, 41, 38, 45

(IV) ?

- A) 30, 33, 36, 29, 32, 25
 B) 30, 33, 26, 29, 22, 25
 C) 30, 23, 16, 19, 21, 24
 D) 30, 27, 34, 31, 38, 35
 E) 30, 23, 26, 19, 22, 15

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7. (I) 16, 32, 8, 16, 4, 8, 2
 (II) 8, 6, 10, 8, 12, 10, 14
 (III) 10, 40, 20, 80, 40, 160, 80

(IV) ?

- A) 20, 80, 40, 160, 80, 320, 160
 B) 20, 18, 22, 20, 24, 22, 26
 C) 20, 16, 18, 14, 16, 12, 14
 D) 20, 16, 32, 28, 56, 52, 104
 E) 20, 24, 12, 16, 8, 12, 6

8. (I) 3, 12, 10, 40, 38, 152
 (II) 4, 12, 9, 27, 24, 72
 (III) 144, 48, 54, 18, 24, 8

(IV) ?

- A) 6, 3, 10, 5, 12, 6
 B) 72, 18, 24, 6, 12, 3
 C) 6, 13, 20, 10, 5, 12, 19
 D) 129, 43, 48, 16, 21, 7
 E) 15, 22, 11, 18, 9, 16

9. (I) 3, 1, 4, 2, 5, 3, 6
 (II) 4, 1, 5, 2, 6, 3, 7
 (III) 2, 4, 8, 16, 20, 40, 44

(IV) ?

- A) 3, 12, 14, 56, 58, 232, 234
 B) 3, 6, 10, 20, 24, 48, 52
 C) 3, 0, 4, 1, 5, 2, 6
 D) 3, 9, 14, 42, 47, 141, 146
 E) 3, 8, 24, 29, 87, 92, 276

10. (I) 2, 8, 7, 12, 10, 14, 11

- (II) 14, 8, 9, 4, 6, 2, 5
 (III) 2, 10, 8, 14, 10, 14, 8

(IV) ?

- A) 14, 6, 8, 2, 6, 2, 8
 B) 14, 22, 20, 26, 22, 26, 20
 C) 14, 20, 19, 24, 22, 26, 23
 D) 14, 12, 20, 16, 22, 16, 20
 E) 14, 15, 9, 11, 6, 9, 5

11. (I) 48, 54, 60, 66, 72, 78

- (II) 32, 26, 20, 14, 8, 2
 (III) 88, 80, 72, 64, 56, 48

(IV) ?

- A) 36, 40, 44, 48, 52, 56
 B) 16, 24, 32, 40, 48, 56
 C) 60, 52, 44, 36, 28, 20
 D) 6, 12, 18, 24, 30, 36
 E) 42, 38, 34, 30, 26, 22

12. (I) 3, 6, 7, 14, 15, 30

- (II) 5, 10, 9, 18, 17, 34
 (III) 2, 4, 6, 12, 14, 28

(IV) ?

- A) 11, 22, 20, 40, 38, 76
 B) 5, 10, 12, 24, 26, 52
 C) 40, 38, 34, 28, 20, 10
 D) 2, 4, 8, 16, 32, 64
 E) 4, 8, 9, 18, 38

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1	2	3	4	5	6	7	8	9	10	11	12
B	C	A	C	A	E	C	A	D	A	B	A



YANITLAR / ANSWERS

BÖLÜM 04 CHAPTER

Bölüm / Chapter 4

İŞLEMLER OPERATIONS

Test 1

1. I. $a \oplus b = a + b - 1$
II. $a \bullet b = a - b + 1$
III. $a \blacktriangle b = a + b + 1$

IV. $(12 \blacktriangle 6) \bullet (8 \oplus 13) = ?$

- A) -2
B) -1
C) 0
D) 1
E) 2

2. I. $a \square b = a + 2 \cdot b$
II. $a \blacktriangledown b = 3 \cdot a + b$
III. $a \oslash b = 2a + 3b$

IV. $(8 \blacktriangledown 3) \oslash (6 \square 5) = ?$

- A) 100
B) 102
C) 104
D) 106
E) 108

3. I. $a \clubsuit b = a^2 + b$
II. $a \spadesuit b = a + b^2$
III. $a \ddagger b = a^2 + b^2$

IV. $(3 \clubsuit 4) \ddagger (6 \spadesuit 3) = ?$

- A) 390
B) 392
C) 394
D) 396
E) 398

İşlemler / Operations

4. I. $a \leftrightsquigarrow b = a^b$
II. $a \checkmark b = b^a$
III. $a \heartsuit b = (a + b)^2$

IV. $(2 \checkmark 3) \heartsuit (3 \leftrightsquigarrow 2) = ?$

- A) 284
B) 314
C) 324
D) 364
E) 414

5. I. $a \bowtie b = a^3 + b$
II. $a \circledast b = \frac{a+b}{2}$
III. $a \otimes b = a - b$

IV. $(24 \bowtie 10) \circledast (3 \otimes 7) = ?$

- A) 20
B) 24
C) 28
D) 32
E) 36

METROPOL YAYINLARI - METROPOL PUBLICATIONS

6. I. $a \bowtie b = 4a + b$
II. $a \circledast b = \frac{1}{a} + \frac{1}{b}$
III. $a \otimes b = (a \cdot b) + 1$

IV. $(4 \bowtie 6) \otimes (\frac{1}{3} \circledast \frac{1}{4}) = ?$

- A) 103
B) 104
C) 105
D) 106
E) 107

7. I. $a \triangleleft b = \frac{1}{a} + b$

II. $a \triangleright b = a + \frac{1}{b}$

III. $a \bowtie b = \frac{1}{a+b}$

IV. $(2 \triangleleft 3) \bowtie (4 \triangleright 2) = ?$

A) $\frac{1}{16}$

B) $\frac{1}{8}$

C) 1

D) 8

E) 16

8. I. $a \blacksquare b = 3 \cdot a + 2 \cdot b$

II. $a \odot b = a + b^2 + 1$

III. $a \lhd b = \frac{a^2 + b}{4}$

IV. $(6 \blacksquare 4) \odot (5 \lhd 3) = ?$

A) 73

B) 74

C) 75

D) 76

E) 77

9. I. $a \blacksquare b = \frac{a+b}{3}$

II. $a \bowtie b = \frac{a+2 \cdot b}{4}$

III. $a \heartsuit b = 3 \cdot (a+3 \cdot b)$

IV. $(4 \heartsuit 4) \bowtie (21 \blacksquare 27) = ?$

A) 16

B) 18

C) 20

D) 22

E) 24

10. I. $a \circledast b = \frac{a}{b} - 1$

II. $a \odot b = \frac{a \cdot b}{2}$

III. $a @ b = (a+b) \cdot 3$

IV. $(9 @ 4) \odot (15 \circledast 3) = ?$

A) 76

B) 78

C) 80

D) 82

E) 84

11. I. $a * b = a + 4 \cdot b$

II. $a \bullet b = b - 3 \cdot a$

III. $a \square b = 2 \cdot a + 3 \cdot b$

IV. $(4 * 8) \square (4 \bullet 22) = ?$

A) 94

B) 96

C) 98

D) 100

E) 102

12. I. $a \rightarrow b = a^2 + b^3$

II. $a * b = \frac{b}{a}$

III. $a \ddagger b = a \cdot b + b$

IV. $(5 \ddagger 6) * (3 \rightarrow 3) = ?$

A) $\frac{1}{2}$

B) 1

C) 2

D) $\frac{5}{2}$

E) 3



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	C	C	B	E	B	D	C	B	E	B

I. $2 \cdot a \star b = a + b$

II. $a \bullet 3 \cdot b = a \cdot b$

III. $(8 \bullet 9) + (10 \star 4) = ?$

A) 32

B) 33

C) 34

D) 35

E) 36

2. I. $3a \square b = a + 2 \cdot b$

II. $a \blacktriangledown b^2 = a \cdot b$

III. $(9 \blacktriangledown 16) + (12 \square 5) = ?$

A) 44

B) 48

C) 50

D) 52

E) 54

3. I. $a^2 \clubsuit 3 \cdot b = a + b + 1$

II. $4 \cdot a \clubsuit b = b - a$

III. $(25 \clubsuit 9) - (8 \clubsuit 5) = ?$

A) 5

B) 6

C) 7

D) 8

E) 9

4. I. $a \leftrightsquigarrow 5 \cdot b = a^2 + b$

II. $a^3 \checkmark b = a + b^2$

III. $(64 \checkmark 3) + (9 \leftrightsquigarrow 30) = ?$

A) 100

B) 101

C) 102

D) 103

E) 104

5. I. $3 \cdot a \bowtie b = 2 \cdot a + 3 \cdot b$

II. $a \circledast 4 \cdot b = 3 \cdot a + 2 \cdot b$

IV. $(8 \circledast 16) - (12 \bowtie 2) = ?$

A) 12

B) 14

C) 16

D) 18

E) 20

6. I. $5 \cdot a \bowtie 2 \cdot b = a + b$

II. $3 \cdot a \bowtie 4 \cdot b = a - b$

III. $(27 \bowtie 20) + (45 \bowtie 8) = ?$

A) 13

B) 14

C) 15

D) 16

E) 17

7. I. $2 \cdot a \text{ } \mathbb{a} b^2 = \frac{a+b}{2}$

II. $a^3 \text{ } \blacklozenge 3 \cdot b = a + 2 \cdot b + 1$

III. $(18 \text{ } \mathbb{a} 49) + (64 \text{ } \blacklozenge 21) = ?$

A) 27

B) 28

C) 29

D) 30

E) 31

8. I. $a^2 \text{ } \blacksquare b^3 = 3 \cdot a - 2 \cdot b$

II. $a^4 \text{ } \circledcirc b^5 = a^2 + b^3$

III. $(121 \text{ } \blacksquare 125) - (81 \text{ } \circledcirc 32) = ?$

A) 6

B) 7

C) 8

D) 9

E) 10

9. I. $4 \cdot a \text{ } \blacktriangle 2 \cdot b = a^2 + b^2$

II. $a^3 \text{ } \blacksquare b^2 = 8 \cdot a + 5 \cdot b$

IV. $(64 \text{ } \blacksquare 25) + (16 \text{ } \blacktriangle 8) = ?$

A) 88

B) 89

C) 90

D) 91

E) 92

10. I. $\frac{x}{2} @ \frac{y}{3} = 4 \cdot x + y$

II. $\frac{2x}{3} @ \frac{3y}{4} = x^2 - y^2$

III. $(10 @ 4) + (8 @ 9) = ?$

A) 90

B) 91

C) 92

D) 93

E) 94

11. I. $a^4 \text{ } \bullet b = a + b^2$

II. $a \text{ } \blacklozenge b^3 = a^3 + b^2$

III. $a^3 \text{ } \blacktriangle b^2 = a + b$

IV. $(27 \text{ } \blacktriangle 25) + (4 \text{ } \circledcirc 8) + (16 \text{ } \bullet 4) = ?$

A) 92

B) 94

C) 96

D) 98

E) 100

METROPOL YAYINLARI • METROPOL PUBLICATIONS

12. I. $2 \cdot a \text{ } \blacklozenge 3 \cdot b = a + b + 2$

II. $4 \cdot a \text{ } \heartsuit b^2 = a^2 + b - 2$

III. $a^3 \text{ } \textcircled{y} \frac{b}{2} = \frac{a}{3} + 3 \cdot b + 3$

IV. $(12 \text{ } \heartsuit 64) + (27 \text{ } \textcircled{y} 15) - (64 \text{ } \blacklozenge 6) = ?$

A) 69

B) 70

C) 71

D) 72

E) 73



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	B	A	D	E	A	A	B	C	B	E

1. I. $a \star b = 2 \cdot (a \bullet b)$
 II. $a \bullet b = (a + b) \cdot 3$
 III. $(4 \star 3) = ?$
- A) 36
 B) 38
 C) 40
 D) 42
 E) 44

2. I. $a \blacksquare b = \frac{a \bullet b}{2}$
 II. $a \bullet b = a + b - 2$
 III. $\blacksquare 6 \blacksquare (8 \blacksquare 10) = ?$
- A) 4
 B) 6
 C) 8
 D) 10
 E) 12

3. I. $a \bigcirc b = a^2 \blacksquare b$
 II. $a \blacksquare b = (a \cdot b) - a$
 III. $2 \bigcirc (4 \blacksquare 3) = ?$
- A) 20
 B) 24
 C) 28
 D) 32
 E) 36

4. I. $a \bowtie b = 3 \cdot a \oslash (b - 12)$
 II. $a \oslash b = a^2 - b^2$
 III. $(3 \oslash 2) \bowtie (6 \oslash 3) = ?$
- A) 0
 B) 1
 C) 2
 D) 3
 E) 4

5. I. $a \odot b = a^b \bullet 1$
 II. $a \bullet b = (a + 2 \cdot b + 2)$
 III. $(6 \odot 2) \bullet (3 \odot 4) = ?$
- A) 210
 B) 211
 C) 212
 D) 213
 E) 214

6. I. $a \blacksquare b = a \checkmark (b+1)$
 II. $a \checkmark b = (a - 2) \cdot b$
 III. $(4 \checkmark 8) \blacksquare (6 \checkmark 4) = ?$
- A) 232
 B) 234
 C) 236
 D) 238
 E) 240

METROPOL YAYINLARI - METROPOL PUBLICATIONS

7. I. $a \star b = 2 \cdot a \bullet (b + 2)$
 II. $a \bullet b = \frac{(a+2)}{b}$
 III. $(10 \bullet 4) \star (16 \bullet 9) = ?$
- A) 1
 B) 2
 C) 3
 D) 4
 E) 5
8. I. $a \blacktriangle b = 4 \cdot a \star b^2$
 II. $a \star b = 2 \cdot a + \frac{b}{2}$
 III. $(12 \blacktriangle 4) \star (4 \blacktriangle 6) = ?$
- A) 231
 B) 232
 C) 233
 D) 234
 E) 235
9. I. $a \oslash b = a^b \oslash b^a$
 II. $a \oslash b = (a - b) + 2$
 III. $(3 \oslash 2) \oslash (4 \oslash 1) = ?$
- A) -2
 B) -1
 C) 0
 D) 1
 E) 2

10. I. $a \odot b = a \bullet 3 \cdot b$
 II. $a \bullet b = 2 \cdot a - b$
 III. $(4 \bullet 3) \odot (6 \bullet 2) = ?$
- A) -8
 B) -7
 C) -6
 D) -5
 E) -4
11. I. $a \blacktriangle b = 2 \cdot a \bullet b$
 II. $a \bullet b = a \oslash 3 \cdot b$
 III. $a \oslash b = 3 \cdot a + 2 \cdot b$
 IV. $(4 \bullet 3) \oslash (2 \blacktriangle 5) = ?$
- A) 172
 B) 174
 C) 176
 D) 178
 E) 180
12. I. $a \times b = \frac{a \blacksquare b}{2}$
 II. $a \blacktriangle b = 4 \cdot (a \times b)$
 III. $a \blacksquare b = a^2 + b$
 IV. $(2 \blacksquare 6) \times (3 \blacktriangle 1) = ?$
- A) 20
 B) 40
 C) 60
 D) 80
 E) 100



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	B	C	A	C	D	B	C	C	A	B	C

1. I. $\frac{10}{(a \clubsuit b)} = 2a + b$

II. $(4 \clubsuit 2) = ?$

- A) $\frac{1}{10}$
- B) $\frac{1}{5}$
- C) 1
- D) 5
- E) 10

2. I. $\frac{1}{2 \cdot (a * b)} = \frac{1}{a^2 + b}$

II. $(2 * 4) = ?$

- A) 2
- B) 4
- C) 6
- D) 8
- E) 10

3. I. $\frac{2}{(a * b)} = \frac{3 \cdot a + 5 \cdot b}{2}$

II. $(1 * 3) = ?$

- A) $\frac{3}{4}$
- B) $\frac{1}{2}$
- C) $\frac{4}{9}$
- D) $\frac{9}{4}$
- E) $\frac{10}{3}$

4. I. $\frac{1}{\frac{1}{(a \square b)}} = \frac{1}{a - b + 2}$

II. $(14 \square 15) = ?$

- A) 2
- B) 1
- C) 0
- D) -1
- E) -2

5. I. $\frac{1}{1 + \frac{1}{(a \blacksquare b)}} = 1 + \frac{1}{a^2 + b^2}$

II. $(1 \blacksquare 2) = ?$

- A) -4
- B) -5
- C) -6
- D) -7
- E) -8

METROPOL YAYINLARI • METROPOL PUBLICATIONS

6. I. $\frac{1}{(a \blacktriangle b) - \frac{1}{2}} = \frac{2}{a + 3 \cdot b}$

II. $(6 \blacktriangle 3) = ?$

- A) 4
- B) 5
- C) 6
- D) 7
- E) 8

Bölüm / Chapter 4

7. I. $\frac{3}{2 \cdot (a \blacklozenge b) - 1} = \frac{2}{a + 2 \cdot b + 2}$
 II. $(4 \blacklozenge 6) = ?$

- A) 8
 B) 10
 C) 12
 D) 14
 E) 16

8. I. $2 - \frac{1}{6 \cdot (a \blacktriangle b)} = \frac{1}{4 \cdot a + 3 \cdot b}$
 II. $(1 \blacktriangle 2) = ?$

- A) $\frac{5}{57}$
 B) $\frac{5}{19}$
 C) 1
 D) 4
 E) $\frac{19}{5}$

9. I. $4 - \frac{7}{(a * b)} = \frac{1}{a - 2b}$
 II. $(8 * 3) = ?$

- A) 4
 B) 5
 C) 6
 D) 7
 E) 8

10. I. $\frac{6}{\frac{1}{(a \odot b)} + 2} = \frac{1}{a^3 + b}$
 II. $(2 \odot 4) = ?$

- A) -2
 B) $-\frac{71}{36}$
 C) $-\frac{35}{18}$
 D) $-\frac{13}{6}$
 E) -4

11. I. $\frac{4 + (a \blacktriangledown b)}{2 + 6 \cdot (a \blacktriangledown b)} = \frac{2}{3 + a + 3 \cdot b}$
 II. $(4 \blacktriangledown 1) = ?$

- A) 16
 B) 18
 C) 20
 D) 22
 E) 24

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12. I. $\frac{1 + \frac{(a \blacklozenge b)}{3}}{2 \cdot (a \blacklozenge b) + 2} = \frac{4}{(a + b) \cdot 2}$
 II. $(4 \blacklozenge 2) = ?$

- A) 4
 B) 3
 C) 2
 D) 1
 E) 0



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	C	B	C	E	D	A	A	B	B	D

1. I. $a \oplus b = a^2 + 4 \cdot b - a \cdot b$

II. $6 \oplus 9 = ?$

A) 18

B) 20

C) 22

D) 24

E) 26

2. I. $a \diamond b = a^b + b^a$

II. $(3 \diamond 4) = ?$

A) 145

B) 144

C) 143

D) 142

E) 141

3. I. $a \blacksquare b = a^2 - b$

II. $a \bullet b = \frac{a+b}{2}$

III. $(8 \bullet 6) \blacksquare 9 = ?$

A) 36

B) 37

C) 38

D) 39

E) 40

4. I. $a \blacktriangle b = a + 2 \cdot b$

II. $a \bullet b = 3 \cdot a - b$

III. $(4 \blacktriangle 3) + (4 \bullet 5) = ?$

A) 16

B) 17

C) 18

D) 19

E) 20

5. I. $a \star b = a + 4 \cdot b + 1$

II. $a \bullet b = 3 \cdot a - b + 4$

III. $(6 \bullet 12) + (9 \star 3) = ?$

A) 28

B) 30

C) 32

D) 34

E) 36

6. I. $a \heartsuit b = 3a + 2b$

II. $a \spadesuit b = b^a$

III. $(8 \heartsuit 5) - (2 \spadesuit 5) = ?$

A) 9

B) 10

C) 11

D) 12

E) 13

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7. I. $8x \heartsuit 3y = x^2 - 2y + xy$

II. $4a \blacktriangleright 5b = 2ab - b^2$

III. $(24 \heartsuit 18) - (16 \blacktriangleright 35) = ?$

A) 2

B) 3

C) 4

D) 5

E) 8

8. I. $\frac{1}{2 + \frac{3}{a \star b}} = \frac{1}{a \star b}$

II. $a \star b = ?$

A) -1

B) -2

C) -3

D) -4

E) -5

9. I. $16 \% 7 = \frac{23}{8}$

II. $24 \% 3 = \frac{9}{4}$

III. $38 \% 12 = \frac{50}{19}$

IV. $52 \% 17 = ?$

A) $\frac{69}{28}$

B) $\frac{69}{26}$

C) $\frac{68}{17}$

D) $\frac{68}{15}$

E) $\frac{26}{69}$

10. I. $\frac{1}{1 + \frac{1}{a \star b}} = \frac{2}{(a+b)}$

II. $(4 \blacksquare 4) = ?$

A) 1

B) 2

C) 3

D) 4

E) 5

11. I. $8y \heartsuit 3x = 2y - x + xy$

II. $9b \blacksquare 3a = 3b + 9a$

III. $8c \bullet 2d = 2c - d$

IV. $(32 \heartsuit 30) + (27 \blacksquare 12) - (24 \bullet 10) = ?$

A) 80

B) 81

C) 82

D) 83

E) 84

12. I. $a \blacktriangle b = 4a - b^2$

II. $a \oslash b = ab - 5$

III. $a * b = 2ab + b$

IV. $((2 * 3) \oslash 4) \blacktriangle 14 = ?$

A) 24

B) 25

C) 26

D) 27

E) 28

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	A	E	B	C	A	E	A	B	A	C	A

1. I. $(7 \blacktriangle 8) \square 2 = 28$

II. $(4 \square 2) \blacktriangle 5 = 10$

III. $48 \square (3 \blacktriangle 8) = 2$

IV. $(18 \square 6) \blacktriangle 18 = ?$

A) 50

B) 51

C) 52

D) 53

E) 54

2. I. $a \oplus b = \frac{(a-b)+8}{2}$

II. $a \blacktriangle b = (a \circ b) - 8$

III. $a \circ b = a \cdot b + 3$

IV. $4 \times (8 \oplus 4) - (4 \blacktriangle 7) = ?$

A) 0

B) 1

C) 2

D) 3

E) 4

3. I. $a \bullet b = \frac{(a \blacksquare b) - 3}{3}$

II. $a \blacksquare b = 3(a \blacktriangle b)$

III. $a \blacktriangle b = a + b - 3$

IV. $3 \cdot (4 \bullet 3) - (3 \blacksquare 4) + (8 \blacktriangle 3) = ?$

A) 1

B) 2

C) 3

D) 4

E) 5

4. I. $x \square y = (x \circ y) + 3$

II. $x \circ y = (a \blacktriangle b) - 8$

III. $a \blacktriangle b = a^2 - b$

IV. $(4 \square 8) + (3 \circ 8) + 4 \cdot (3 \blacktriangle 8) = ?$

A) 0

B) 1

C) 3

D) 5

E) 7

5. I. $a \square b = (a \blacktriangle b) \times 4$

II. $a \blacktriangle b = (a \circ b) + 17$

III. $a \circ b = \frac{ab}{3} \cdot 7$

IV. $(6 \square 9) - 3(9 \circ 7) = ?$

A) 129

B) 130

C) 131

D) 134

E) 135

6. I. $x \heartsuit y = (x \circ y) + x^2 - y^2$

II. $x \circ y = (x \blacktriangle y) - x$

III. $x \blacktriangle y = x^2 - y^2$

IV. $(9 \heartsuit 8) - 2 \cdot (4 \circ 3) = ?$

A) 15

B) 16

C) 17

D) 18

E) 19

7. I. $a \otimes b = (a \blacktriangle b) - a$

II. $a \blacktriangle b = (a \bullet b) - b$

III. $a \bullet b = (ab + a - b)$

IV. $(9 \otimes 3) + (7 \blacktriangle 4) - (8 \bullet 5) = ?$

A) 3

B) 4

C) 5

D) 6

E) 7

8. I. $a \square b = (a \blacktriangle b) + ab$

II. $a \blacktriangle b = (a \circ b) - a^2 + 3b$

III. $a \circ b = 3ab - 4b$

IV. $4 \times (8 \square 3) - 4(3 \circ 5) = ?$

A) 10

B) 12

C) 14

D) 15

E) 16

9. I. $a \checkmark b = (a \otimes b) + a^2$

II. $a \otimes b = (a \blacktriangleright b) - \sqrt{ab}$

III. $a \blacktriangleright b = ab - b^2$

IV. $(8 \checkmark 2) = ?$

A) 70

B) 71

C) 72

D) 73

E) 74

10. I. $a \bullet b = (a * b) - 3a$

II. $a * b = (a * b) - b^2$

III. $a * b = a^2 + b^2 - ab$

IV. $(17 \bullet 14) = ?$

A) 0

B) 1

C) 2

D) 3

E) 4

11. I. $3542 = 42$

II. $2876 = 69$

III. $1689 = 72$

IV. $8490 = ?$

A) 60

B) 61

C) 62

D) 63

E) 64

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12. I. $4789 * 8921 = 8$

II. $3519 * 4732 = 2$

III. $3761 * 1248 = 2$

IV. $4827 * 8217 = ?$

A) 1

B) 2

C) 3

D) 4

E) 5



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	B	E	A	C	E	C	E	C	A	D	C

1. I. $4 \star 3 = 35$

II. $2 \star 4 = 30$

III. $7 \star 2 = 45$

IV. $6 \star 4 = ?$

A) 45

B) 50

C) 55

D) 60

E) 65

2. I. $(3, 5) \star (7, 8) = (10; 40)$

II. $(2, 6) \star (4, 5) = (6; 30)$

III. $(5, 4) \star (2, 3) = ?, ?$

A) (7, 7)

B) (7, 16)

C) (7, 43)

D) (10, 12)

E) (7, 12)

3. I. $\bullet 124 = 8$

II. $\bullet 422 = 16$

III. $\bullet 351 = 15$

IV. $\bullet 411 = ?$

A) 1

B) 2

C) 3

D) 4

E) 5

4. I. $7 \square 8 = 41$

II. $9 \square 5 = 31$

III. $8 \square 3 = 13$

IV. $6 \square 7 = ?$

A) 26

B) 27

C) 28

D) 29

E) 30

5. I. $a \star b = \frac{a^2 + b^2}{2}$

II. $a \blacksquare b = \frac{axb}{2}$

III. $(6 \star 4) \blacksquare (8 \blacksquare 3) = ?$

A) 156

B) 144

C) 121

D) 196

E) 214

6. I. $8 \blacktriangle 4 = 64$

II. $9 \blacktriangle 8 = 1$

III. $6 \blacktriangle 4 = 8$

IV. $10 \blacktriangle 7 = ?$

A) 25

B) 26

C) 27

D) 28

E) 30

7. I. $7 \blacktriangle 2 = 5 ; 45$

II. $6 \blacktriangle 4 = 2 ; 20$

III. $5 \blacktriangle 2 = 3 ; 21$

IV. $3 \blacktriangle 1 = ? ; ?$

A) $2 ; 6$

B) $2 ; 7$

C) $2 ; 8$

D) $2 ; 9$

E) $3 ; 8$

8. I. $3 \blacklozenge 2 = 23$

II. $4 \blacklozenge 6 = 28$

III. $5 \blacklozenge 9 = 44$

IV. $2 \blacklozenge 1 = ?$

A) 0

B) 1

C) 2

D) 5

E) 7

9. I. $6 \blacklozenge 4 = 19$

II. $9 \blacklozenge 7 = 31$

III. $5 \blacklozenge 3 = 15$

IV. $8 \blacklozenge 5 = ?$

A) 24

B) 38

C) 42

D) 56

E) 62

10. I. $463 \textcircled{+} 24$

II. $283 \textcircled{+} 16$

III. $965 \textcircled{+} 90$

IV. $876 \textcircled{+} ?$

A) 72

B) 84

C) 96

D) 108

E) 112

11. I. $4 \bullet 5 = 19$

II. $6 \bullet 8 = 30$

III. $9 \bullet 3 = 18$

IV. $5 \bullet 7 = ?$

A) 23

B) 24

C) 25

D) 26

E) 27

12. I. $[(7 \bullet 4) \square 3] \blacktriangle 2 = 29$

II. $[(5 \bullet 6) \square 8] \blacktriangle 6 = 32$

III. $[(9 \bullet 3) \square 4] \blacktriangle 5 = 26$

IV. $[(8 \bullet 6) \square 9] \blacktriangle 7 = ?$

A) 47

B) 48

C) 49

D) 50

E) 51



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	E	D	D	A	C	C	E	B	E	D	D

1. I. $975 * = 23$

II. $386 * = 19$

III. $754 * = 18$

IV. $695 * = ?$

A) 20

B) 21

C) 22

D) 23

E) 24

2. I. $\bullet 622 \bullet = 8 \cdot 4$

II. $\bullet 841 \bullet = 9 \cdot 5$

III. $\bullet 743 \bullet = ?$

A) 9,7

B) 11,7

C) 10,7

D) 11,3

E) 10,1

3. I. $\blacktriangle 532 = 8 \cdot 5$

II. $\blacktriangle 621 = 8 \cdot 3$

III. $\blacktriangle 832 = ?$

A) 10,1

B) 11,1

C) 11,5

D) 10,5

E) 10,3

4. I. $\bullet 631 = 10$

II. $\bullet 821 = 11$

III. $\bullet 854 \blacksquare = 6$

IV. $\bullet 943 \blacksquare = ?$

A) 3

B) 4

C) 5

D) 6

E) 7

5. I. $\triangle 421 = 2 , 2$

II. $\triangle 821 = 4 , 2$

III. $\triangle 621 = ?$

A) 4,1

B) 3,2

C) 4,2

D) 1,4

E) 3,1

6. I. $\triangle 328 = 832;$

II. $426 \blacksquare = 66$

III. $\triangle 216 \blacksquare = 81$

IV. $\triangle 325 \blacksquare = ?$

A) 28

B) 72

C) 82

D) 84

E) 55

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7. I. $\star 684 = 468$ 265 $\blacktriangle = 85$
 II. $\star 462 \blacktriangle = 66$ $\star 362 \blacktriangle = 56$
 III. $\star 415 \blacktriangle = ?$
 A) 95
 B) 91
 C) 85
 D) 81
 E) 72
8. I. $7 \star 3 = 30$
 II. $8 \star 7 = 45$
 III. $5 \star 9 = 42$
 IV. $7 \star 4 = ?$
 A) 27
 B) 30
 C) 33
 D) 36
 E) 39
9. I. $1 \blacktriangle 2 = 1, 4, 4$
 II. $2 \blacktriangle 3 = 4, 12, 9$
 III. $1 \blacktriangle 5 = 1, 10, 25$
 IV. $3 \blacktriangle 4 = ?$
 A) 4, 6, 16
 B) 9, 25, 16
 C) 9, 24, 16
 D) 9, 16, 16
 E) 6, 12, 16

10. I. $\blacktriangle 324 = 432$
 II. $145 \square = 55$
 III. $\blacktriangle 821 \square = 92$
 IV. $\blacktriangle 572 \square = 77$
 V. $\blacktriangle 213 \square = ?$
 A) 53
 B) 51
 C) 43
 D) 42
 E) 33
11. I. $\bullet 432 = 7,5$
 II. $\bullet 511 = 6,2$
 III. $\bullet 705 = 7,5$
 IV. $\bullet 100 = ?$
 A) 10,1
 B) 10,0
 C) 1,1
 D) 1,0
 E) 1,01
12. I. $5 \blacktriangle 4 = 1 : 20$
 II. $7 \blacktriangle 3 = 4 : 21$
 III. $4 \blacktriangle 3 = 1 : 12$
 IV. $6 \blacktriangle 6 = ? : ?$
 A) 0,12
 B) 0,36
 C) 1,12
 D) 1,36
 E) 12,36

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 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	C	C	C	B	C	B	C	C	B	D	B

1. I. $643 \blacktriangle 48 = 24$

II. $394 \blacktriangle 27 = 81$

III. $682 \blacktriangle 33 = 63$

IV. $824 \blacktriangle 42 = ?$

A) 20

B) 22

C) 24

D) 26

E) 28

2. I. $68 \odot = 34$

II. $44 \odot = 8$

III. $52 \odot = 3$

IV. $66 \odot = ?$

A) 16

B) 18

C) 20

D) 22

E) 24

3. I. $574 \ddot{\div} = 3528$

II. $683 \ddot{\div} = 4824$

III. $927 \ddot{\div} = 1814$

IV. $752 \ddot{\div} = ?$

A) 127

B) 357

C) 3412

D) 3510

E) 3840

4. I. $\triangle 517 = 67$

II. $\square 438 = 843$

III. $\triangle 465 \square = 510$

IV. $\triangle 736 \square = ?$

A) 510

B) 610

C) 160

D) 105

E) 106

5. I. $5 \bullet 4 = 10, 9, 8$

II. $3 \bullet 6 = 6, 9, 12$

III. $7 \bullet 1 = 14, 8, 2$

IV. $8 \bullet 3 = ?$

A) 16, 8, 6

B) 18, 11, 6

C) 16, 8, 3

D) 15, 10, 3

E) 16, 11, 6

6. I. $4 \blacksquare 3 = \frac{12}{7}$

II. $3 \blacksquare 2 = \frac{6}{5}$

III. $5 \blacksquare 2 = \frac{10}{7}$

IV. $\frac{1}{a} \blacksquare \frac{1}{b} = ?$

A) $a + b$

B) $\frac{1}{a+b}$

C) $\frac{ab}{a+b}$

D) $\frac{a+b}{ab}$

E) $\frac{a}{a+b}$

- 7.** I. $4 \blacktriangledown 2 = \frac{4}{3}$
 II. $2 \blacktriangledown 1 = \frac{2}{3}$
 III. $6 \blacktriangledown 5 = \frac{30}{11}$
 IV. $7 \blacktriangledown 6 = ?$
 A) $\frac{43}{14}$ B) $\frac{41}{14}$ C) $\frac{41}{13}$
 D) $\frac{42}{11}$ E) $\frac{42}{13}$
- 8.** I. $a \spadesuit b = (a \triangle b) \blacksquare b$
 II. $a \triangle b = \frac{(a \blacksquare b)}{4}$
 III. $a \blacksquare b = 2a + b$
 IV. $8 \spadesuit 16 = ?$
 A) 26
 B) 28
 C) 30
 D) 32
 E) 34

- 9.** I. $a \otimes b = (a * b) - 1$
 II. $a * b = (a \blacklozenge b) + 1$
 III. $a \blacklozenge b = (a \times b) + 1$
 IV. $9 \otimes 6 = ?$
 A) 52
 B) 53
 C) 54
 D) 55
 E) 56

- 10.** I. $943 \blacksquare = 4$
 II. $889 \blacksquare = 5$
 III. $414 \blacksquare = 3$
 IV. $664 \blacksquare = ?$
 A) 1
 B) 2
 C) 3
 D) 4
 E) 5
- 11.** I. $669 \blacklozenge = 27$
 II. $948 \blacklozenge = 28$
 III. $385 \blacklozenge = 19$
 IV. $759 \blacklozenge = ?$
 A) 25
 B) 26
 C) 27
 D) 28
 E) 29

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- 12.** I. $94 \blacklozenge 82 = 30$
 II. $51 \blacklozenge 73 = 16$
 III. $72 \blacklozenge 96 = 15$
 IV. $83 \blacklozenge 52 = ?$
 A) 9
 B) 12
 C) 15
 D) 18
 E) 21

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
B	E	D	B	E	B	E	D	D	D	B	C

1. I. $28 \square = 4,64$

II. $\triangle 72 = 25$

III. $\triangle 95 = 16$

IV. $\triangle 80 \square = ?$

A) 9,16

B) 81,64

C) 36,16

D) 49,81

E) 25,49

2. I. $42 \circ = 12$ $\otimes 22 = 10$

II. $81 \circ = 18$ $\otimes 62 = 34$

III. $\otimes 93 \circ = ?$

A) 18

B) 24

C) 36

D) 54

E) 64

3. I. $25 \square = 15$ $13 \triangle = 16$

II. $49 \square = 21$ $27 \triangle = 81$

III. $45 \triangle \square = ?$

A) 9

B) 15

C) 18

D) 27

E) 36

4. I. $\star 5 = 24$

II. $\star 9 = 80$

III. $\blacksquare 18 = 9$

IV. $\star 7 \blacksquare \blacksquare = ?$

A) 4

B) 8

C) 12

D) 49

E) 54

5. I. $1 \triangle 4 = 25$

II. $2 \triangle 7 = 81$

III. $(2 \triangle 1) \triangle (2 \triangle 2) = ?$

A) 1025

B) 625

C) 360

D) 169

E) 120

6. I. $15 \diamond = 36$

II. $12 \diamond = 9$

III. $14 \diamond \diamond = ?$

A) 4

B) 16

C) 49

D) 56

E) 64

7. I. $4 \star 5 = 41$

II. $7 \star 3 = 58$

III. $8 \star 4 = 80$

IV. $6 \star 9 = ?$

A) 117

B) 104

C) 96

D) 84

E) 76

8. I. $6 \square 4 \rightarrow 10,24$

II. $5 \square 12 \rightarrow 17,60$

III. $7 \square 8 \rightarrow ?$

A) 56,15

B) 28,16

C) 15,56

D) 42,16

E) 16,28

9. I. $10 \diamond 6 = 4$

II. $18 \diamond 6 = 2$

III. $24 \diamond 12 = 3$

IV. $9 \diamond 3 = ?$

A) 2

B) 3

C) 4

D) 5

E) 6

10. I. $a \triangle = a + 3$

II. $(a \triangle) \square = a$

III. $5 \triangle + 8 \square = ?$

A) 12

B) 13

C) 14

D) 15

E) 16

11. I. $a \blacklozenge 5 = 6a^2 + 25$

II. $2 \blacklozenge 2 = 28$

III. $4 \blacklozenge 3 = ?$

A) 105

B) 73

C) 70

D) 49

E) 33

12. I. $9 \blacksquare = 64$

II. $\blacksquare 7 = 64$

III. $\blacksquare 6 + 5 \blacksquare = ?$

A) 65

B) 71

C) 72

D) 84

E) 92


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	A	D	C	B	C	A	C	A	B	A	A

1. I. $49 \triangleright = 34$

II. $25 \triangleright = 10$

III. $74 \triangleright \triangleright = ?$

A) 90

B) 82

C) 44

D) 33

E) 21

2. I. $4 \times 6 = 28$

II. $5 \times 10 = 25$

III. $4 \times 7 = 15$

IV. $3 \times 5 = ?$

A) 2

B) 3

C) 4

D) 5

E) 6

3. I. $23 \checkmark 26 = 7$

II. $19 \checkmark 17 = 6$

III. $46 \checkmark 35 = 9$

IV. $87 \checkmark 34 = ?$

A) 8

B) 9

C) 10

D) 11

E) 12

4. I. $16 \heartsuit 8 = 6$

II. $17 \heartsuit 11 = 7$

III. $19 \heartsuit 13 = 8$

IV. $22 \heartsuit 34 = ?$

A) 10

B) 12

C) 14

D) 16

E) 18

5. I. $14 * 5 = 27$

II. $16 * 12 = 12$

III. $21 * 16 = 15$

IV. $32 * 19 = ?$

A) 30

B) 33

C) 36

D) 39

E) 42

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7. I. $415 \blacksquare = 91$

II. $415 \bullet = 201$

III. $(624 \bullet) \blacksquare = ?$

A) 44

B) 45

C) 46

D) 47

E) 48

8. I. $\square M = 3 \cdot M$

II. $\triangle N = \frac{N}{2}$

III. $\square 4 \triangle = ?$

A) 6

B) 12

C) 15

D) 16

E) 25

9. I. $a \blacksquare b = a + 2b - 2$

II. $a \blacktriangle b = 3a + b + 4$

III. $a \bullet b = 2a + 3b$

IV. $(3 \blacksquare 2) \bullet (4 \blacktriangle 3) = ?$

A) 64

B) 65

C) 66

D) 67

E) 68

10. I. $a \ast b = a^b$

II. $a \blacktriangleright b = (b^a)^2$

III. $a \boxplus b = (2^{a+b})$

IV. $(2 \ast 2) \boxplus (1 \blacktriangleright 2) = ?$

A) 16

B) 32

C) 64

D) 125

E) 256

11. I. $(2, 4) \blacksquare (1, 2) = 16$

II. $(3, 1) \blacksquare (2, 2) = 12$

III. $(4, 2) \blacksquare (2, 4) = ?$

A) 8

B) 16

C) 32

D) 64

E) 128

12. I. $11 \star 25 = 7$

II. $17 \star 8 = 6$

III. $7 \star 9 = 5$

IV. $4 \star 5 = ?$

A) 6

B) 5

C) 4

D) 3

E) 2

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
C	A	D	C	D	D	A	A	D	E	D	C

I. $12 \spadesuit 16 = 14$

II. $8 \clubsuit 22 = 15$

III. $19 \heartsuit 13 = 16$

IV. $17 \clubsuit 11 = ?$

A) 18

B) 16

C) 14

D) 12

E) 10

I. $29 \text{ ☎} 26 = 27$

II. $17 \text{ ☎} 12 = 125$

III. $47 \text{ ☎} 36 = 1331$

IV. $33 \text{ ☎} 29 = ?$

A) 16

B) 25

C) 36

D) 49

E) 64

I. $(2 \star 7) = 47$

II. $(3 \star 6) = 33$

III. $(5 \star 6) = 31$

IV. $(8 \star 9) = ?$

A) 16

B) 24

C) 42

D) 60

E) 73

I. $x \triangle y = x \circ y - 1$

II. $x \square y = x + y + 1$

III. $(2 \triangle 3) \square 4 = ?$

A) 10

B) 11

C) 12

D) 13

E) 14

I. $425 \diamond 213 = 46$

II. $647 \diamond 423 = 192$

III. $524 \diamond 285 = 120$

IV. $693 \diamond 247 = ?$

A) 216

B) 218

C) 220

D) 222

E) 224

I. $6 \leftrightarrow 8 = 49$

II. $3 \leftrightarrow 13 = 64$

III. $5 \leftrightarrow 7 = 36$

IV. $8 \leftrightarrow 4 = ?$

A) 16

B) 25

C) 36

D) 49

E) 64

METROPOL YAYINLARI / METROPOL PUBLICATIONS

7. I. $72 \square 81 = 98$

II. $35 \square 84 = 832$

III. $98 \square 37 = 1721$

IV. $17 \square 65 = ?$

A) 830

B) 11

C) 711

D) 831

E) 730

8. I. $5 \blacklozenge 3 = 2$

II. $12 \blacklozenge 15 = 3$

III. $93 \blacklozenge 32 = 5$

IV. $40 \blacklozenge 24 = ?$

A) 0

B) 1

C) 2

D) 3

E) 4

9. I. $\square(XYZT) = ZTXY$

II. $\triangle(XYZT) = XZYT$

III. $\square(\triangle(3579)) = ?$

A) 3759

B) 3579

C) 5937

D) 5973

E) 7953

10. I. $6 \% 7 = 41$

II. $5 \% 4 = 19$

III. $9 \% 2 = 17$

IV. $7 \% 5 = ?$

A) 26

B) 30

C) 32

D) 34

E) 44

11. I. $a \spadesuit b = a^b$

II. $a \heartsuit b = b^a - b$

III. $a \clubsuit b = \frac{a^b}{b^a}$

IV. $(2 \clubsuit 8) \spadesuit (2 \heartsuit 2) = ?$

A) 1

B) 2

C) 4

D) 8

E) 16

METROPOL YAYINLARI • METROPOL PUBLICATIONS

12. I. $a * b = (a \cdot b) + b$

II. $a \bullet b = (a \cdot b) - a$

III. $a \square b = (a + b) \cdot 2$

IV. $(8 * 4) \square (6 \bullet 2) = ?$

A) 84

B) 86

C) 88

D) 90

E) 92

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	E	E	A	B	C	A	E	C	D	E	A

1. I. $a \spadesuit b = \frac{a}{b} + a$

II. $a \blacktriangledown b = b - \frac{b}{a}$

III. $a \bullet b = \frac{1}{a} + \frac{1}{b}$

IV. $(32 \spadesuit 4) \bullet (5 \blacktriangledown 25) = ?$

A) $\frac{1}{5}$

B) $\frac{4}{15}$

C) $\frac{1}{3}$

D) $\frac{2}{5}$

E) $\frac{3}{40}$

2. I. $a \Delta b = \frac{a-b}{3}$

II. $a \otimes b = 2(a+b) - 1$

III. $a \ominus b = a + 2 \cdot b$

IV. $(4 \otimes 2) \ominus (12 \Delta 3) = ?$

A) 14

B) 15

C) 16

D) 17

E) 18

3. I. $a \# b = 4 \cdot a + 5 \cdot b$

II. $a \& b = 3 \cdot b - 2 \cdot a$

III. $a \$ b = \frac{a+b}{2} + 1$

IV. $(8 \# 2) \$ (12 \& 18) = ?$

A) 36

B) 37

C) 38

D) 39

E) 40

4. I. $a \clubsuit b = a^2 + b^3$

II. $a \heartsuit b = a + b^2 + 1$

III. $a \bowtie b = \frac{b-2a}{3}$

IV. $(5 \heartsuit 2) \bowtie (1 \clubsuit 4) = ?$

A) 13

B) 14

C) 15

D) 16

E) 17

5. I. $a \odot b = (a+1) \cdot b$

II. $a \otimes b = (b+3) - a$

III. $a \divideontimes b = (a-b) + a + b$

IV. $(8 \divideontimes 3) \otimes (6 \odot 7) = ?$

A) 13

B) 14

C) 15

D) 16

E) 17

6. I. $3 \cdot a^2 * 2 \cdot b^3 = a^3 + b^2$

II. $a^b \bullet b^a = a + b$

III. $\frac{a^2}{2} \blacksquare \frac{b^3}{3} = 3 \cdot a + b$

IV. $(48 * 16) - (25 \bullet 32) - (18 \blacksquare 9) = ?$

A) 34

B) 36

C) 38

D) 40

E) 42

METROPOL YAYINLARI - METROPOL PUBLICATIONS

7. I. $4 \cdot a \times 5 \cdot b = 3 \cdot a - 2 \cdot b$
 II. $a^3 + 2 \cdot b^2 = a^b + 2$
 III. $\frac{5}{2} \cdot a + 2 \cdot b = (a \cdot b) - a$

IV. $(125 \diamond 8) - (28 \times 15) + (10 \diamond 8) = ?$

- A) 20
 B) 21
 C) 22
 D) 23
 E) 24

8. I. $8 \cdot a \oslash 9 \cdot b = 3 \cdot a + b^2$
 II. $a^3 \bowtie b^2 = a^4 - b^3$
 III. $\frac{a+b}{5} \blacktriangleright \frac{a-b}{3} = 2 \cdot b - a$

IV. $(32 \oslash 45) - (7 \bowtie 3) - (27 \bowtie 16) = ?$

- A) 13
 B) 14
 C) 15
 D) 16
 E) 17

9. I. $\sqrt{a} \bowtie \sqrt{b} = a - b - 4$
 II. $3\sqrt{a} \bullet 3\sqrt{b} = b - a + 2$
 III. $(2 \cdot a)^2 \bowtie (3 \cdot b)^2 = \frac{a}{b} + b$

IV. $(3 \bullet 4) - (64 \bowtie 36) - (8 \bowtie 6) = ?$
 A) 8
 B) 9
 C) 10
 D) 11
 E) 12

10. I. $16 \cdot a \bowtie 12 \cdot b = 3 \cdot a + 5 \cdot b$
 II. $\frac{a}{2} \blacksquare \frac{b}{3} = (a + b) \cdot 2$

III. $(48 \bowtie 36) - (6 \blacksquare 4) = ?$

- A) 0
 B) -12
 C) -24
 D) -48
 E) -64

11. I. $a^2 \divideontimes b = b^2 + a$
 II. $a \bullet 4b = a^2 - b$

III. $(36 \divideontimes 4) \bullet (5 \bullet 20) = ?$
 A) 477
 B) 478
 C) 479
 D) 480
 E) 481

12. I. $4a \clubsuit 3b = 3a + 2b$
 II. $a^3 \clubsuit b = a^2 + b^2$
 III. $(24 \clubsuit 21) \clubsuit (27 \clubsuit 3) = ?$

- A) 32
 B) 34
 C) 36
 D) 38
 E) 40

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	D	B	C	E	D	E	D	D	C	C	C

1. I. $5 \cdot a \blacktriangle 6 \cdot b = 2 \cdot a + 4 \cdot b$

II. $\frac{a}{3} \blacksquare \frac{b}{4} = 2 \cdot a + 3 \cdot b$

III. $(30 \blacktriangle 24) \blacksquare (4 \blacksquare 3) = ?$

A) 882

B) 884

C) 886

D) 888

E) 890

2. I. $a \blacksquare b = a \spadesuit 2 \cdot b$

II. $a \spadesuit b = 3 \cdot a \blacktriangledown b$

III. $a \blacktriangledown b = \frac{1}{a} + \frac{1}{b}$

IV. $\left(\frac{1}{3} \blacksquare \frac{1}{2}\right) \blacktriangledown \left(\frac{1}{6} \spadesuit \frac{1}{4}\right) = ?$

A) $\frac{1}{2}$

B) $\frac{2}{3}$

C) 1

D) $\frac{3}{2}$

E) 2

3. I. $a \times b = 3 \cdot a \blacktriangle 2 \cdot b$

II. $a \blacktriangle b = \frac{a}{2} \blacksquare \frac{b}{3}$

III. $a \blacksquare b = a^{-1} + b^{-1}$

IV. $(1 \blacktriangle 2) \times (2 \blacksquare 3) = ?$

A) $\frac{43}{22}$

B) $\frac{106}{53}$

C) $\frac{21}{11}$

D) $\frac{109}{110}$

E) $\frac{209}{105}$

4. I. $a \times b = \frac{2 \cdot a}{3} \blacksquare \frac{b}{2}$

II. $a \blacksquare b = 6 \cdot a \bullet 2 \cdot b$

III. $a \bullet b = \frac{a+b}{2}$

IV. $(6 \bullet 6) \times (2 \blacksquare 4) = ?$

A) 17

B) 18

C) 19

D) 20

E) 21

5. I. $a \blacksquare b = 3 \cdot a \bullet 4 \cdot b$

II. $a \bullet b = (a - 6) \triangle (b - 5)$

III. $a \triangle b = (a \cdot b) - (a + b)$

IV. $(5 \blacksquare 2) \triangle (3 \bullet 4) = ?$

A) 81

B) 82

C) 83

D) 84

E) 85

METROPOL YAYINLARI • METROPOL PUBLICATIONS

6. I. $a \heartsuit b = 4 \cdot a \clubsuit b$

II. $a \clubsuit b = a \spadesuit 5 \cdot b$

III. $a \spadesuit b = \frac{a}{8} + \frac{b}{10}$

IV. $(16 \clubsuit 4) \heartsuit (20 \spadesuit 20) = ?$

A) 6

B) 8

C) 10

D) 12

E) 14

7. I. $a \blacktriangle b = a^2 \bullet b$
 II. $a \bullet b = 3 \cdot a \oplus b^2$
 III. $a \otimes b = 2 \cdot a + b$
 IV. $(3 \blacktriangle 2) \otimes (4 \bullet 1) = ?$

A) 133
 B) 135
 C) 137
 D) 139
 E) 141

8. I. $a \oplus b = (a \otimes 2b) + 1$
 II. $a \otimes b = (2 \cdot a \blacktriangle b) - 2$
 III. $a \blacktriangle b = 2 \cdot a + 3 \cdot b + 3$
 IV. $(4 \otimes 2) \otimes (2 \blacktriangle 4) = ?$

A) 177
 B) 178
 C) 179
 D) 180
 E) 181

9. I. $a \bullet b = 3 \cdot a \blacktriangle 4 \cdot b$
 II. $a \blacktriangle b = (a + 8) \otimes (b - 4)$
 III. $a \otimes b = (a + b) \cdot 2$
 IV. $(3 \blacktriangle 7) \bullet (5 \otimes 2) = ?$

A) 302
 B) 304
 C) 308
 D) 608
 E) 616

10. I. $\frac{4}{(a * b)} = \frac{2}{(a + b) \cdot 4}$
 II. $\frac{3}{(a \bullet b) - 1} = \frac{2}{3a + b}$
 III. $\frac{(3 * 1)}{(1 \bullet 1)} = ?$

A) 1 B) $\frac{8}{7}$ C) $\frac{11}{5}$
 D) 2 E) $\frac{15}{7}$

11. I. $\frac{2 + (a * b)}{4 \cdot (a \blacktriangle b)} = \frac{4}{(a + b)}$
 II. $2 \cdot (6 \blacktriangle 2) - (6 * 2) = ?$

A) 1
 B) 2
 C) 3
 D) 4
 E) 5

METROPOL YAYINLARI • METROPOL PUBLICATIONS

12. I. $\frac{2(a \otimes b)}{5(a \Delta b)} = \frac{a + b}{a - b}$
 II. $\frac{(12 \bullet 4)}{(12 \Delta 4)} = ?$

A) 4 B) $\frac{15}{4}$ C) 3
 D) $\frac{5}{2}$ E) 2

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	B	E	A	C	D	E	B	D	B	B	B

1. I. $\frac{2}{\frac{(a \star b) + 1}{(a \square b) - 2}} = \frac{a \cdot b}{a + b}$

II. $8 \cdot (3 \triangle 4) - 7(3 \star 4) = ?$

A) 23

B) 22

C) 21

D) 20

E) 19

2. I. $a \blacktriangle b = 2 \cdot (a \bullet b)$

II. $a \bullet b = (a \oplus b) - b$

III. $a \oplus b = a + b + 2$

IV. $(4 \blacktriangle 8) = ?$

A) 10

B) 12

C) 14

D) 16

E) 18

3. I. $13x \triangle 8y = 2x - y$

II. $16a \square 4b = 3a + 2b$

III. $8c \bullet 6d = c^2 - 3d$

IV. $(39 \triangle 32) + (32 \square 16) + (64 \bullet 60) = ?$

A) 49

B) 50

C) 51

D) 52

E) 53

4. I. $a \triangle b = 2a - 3b$

II. $a \square b = ab + b^2$

III. $a \circ b = ab$

IV. $[(8 \triangle 5) \square 4) \circ 2] = ?$

A) 40

B) 48

C) 54

D) 66

E) 78

5. I. $a \bullet b = 2 \cdot (a \oplus b)$

II. $a \blacktriangle b = a \bullet 2 \cdot b$

III. $a \oplus b = 2a - b$

IV. $(4 \bullet 3) \blacktriangle 2 = ?$

A) 28

B) 30

C) 32

D) 34

E) 36

6. I. $5a^2 \odot 3b = 4a - b$

II. $7a \blacksquare 8b = (a + b) \cdot 3$

III. $(125 \odot 39) + (21 \blacksquare 24) = ?$

A) 25

B) 24

C) 23

D) 22

E) 21

7. I. $17a \odot 3b = 5a + 2b$

II. $7a \blacksquare 4b = 2a + b$

III. $(85 \odot 27) - (21 \blacksquare 8) = ?$

A) 31

B) 32

C) 33

D) 34

E) 35

8. I. $2 \cdot a \blacktriangle b = a \bullet 2 \cdot b$

II. $a \bullet b = (a + 2) \oplus (b - 4)$

III. $a \oplus 2 \cdot b = a + b$

IV. $(8 \blacktriangle 4) + (2 \blacktriangle 4) = ?$

A) 11

B) 12

C) 13

D) 14

E) 15

9. I. $a^3 \bowtie b^2 = a \cdot b$

II. $5a \gg b^3 = a + 2b$

III. $(343 \bowtie 121) - (60 \gg 27) = ?$

A) 55

B) 56

C) 57

D) 58

E) 59

10. I. $8753 \blacktriangleright 5641 = 3112$

II. $9276 \blacktriangleright 8154 = 1122$

III. $2846 \blacktriangleright 1431 = 1415$

IV. $4379 \blacktriangleright 3066 = ?$

A) 1313

B) 7396

C) 7286

D) 1318

E) 4614

11. I. $873 \oslash = 9$

II. $427 \oslash = 4$

III. $915 \oslash = 6$

IV. $817 \oslash = ?$

A) 5

B) 6

C) 7

D) 8

E) 9

12. I. $3217 \times = 42$

II. $4865 \times = 90$

III. $2478 \times = 104$

IV. $1340 \times = ?$

A) 0

B) 1

C) 2

D) 3

E) 4



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	B	B	A	C	A	E	C	E	A	C	A

1. I. $\bullet 412 = 241$, $243 \blacksquare = 63$

II. $\bullet 126 \blacksquare = 612 \blacksquare = 72$

III. $\bullet 183 \blacksquare = 48$

IV. $\bullet 612 \blacksquare = ?$

A) 25

B) 36

C) 49

D) 64

E) 81

2. I. $49 \blacktriangle = 36$

II. $25 \blacktriangle = 10$

III. $78 \blacktriangle\blacktriangle = ?$

A) 28

B) 30

C) 56

D) 82

E) 16

3. I. $12 \bullet 8 = 6, 4, 4$

II. $18 \bullet 12 = 9, 6, 6$

III. $16 \bullet 6 = 8, 3, 10$

IV. $12 \bullet 10 = ?, ?, ?$

A) 6, 4, 2

B) 6, 2, 4

C) 6, 5, 2

D) 6, 6, 2

E) 4, 2, 5

4. I. $4 \clubsuit 4 = 8$

II. $5 \clubsuit 9 = 6$

III. $10 \clubsuit 22 = 8$

IV. $3 \clubsuit 9 = ?$

A) 0

B) 16

C) 32

D) 64

E) 122

5. I. $49 \blacktriangle = 13$

II. $56 \blacktriangle = 11$

III. $47 \blacktriangle\blacktriangle = ?$

A) 82

B) 54

C) 28

D) 16

E) 2

6. I. $8 \star 4 = 36$

II. $12 \star 6 = 81$

III. $10 \star 4 = 49$

IV. $5 \star 3 = ?$

A) 4

B) 9

C) 16

D) 64

E) 81

Bölüm / Chapter 4

7. I. $5 \bullet 4 = 81; 1$

II. $4 \bullet 1 = 25; 27$

III. $7 \bullet 5 = 144; 8$

IV. $6 \bullet 2 = ?; ?$

A) 64; 16

B) 54; 4

C) 56; 35

D) 64; 64

E) 36; 64

8. I. $123 \bullet 12 = 3$

II. $426 \bullet 124 = 5$

III. $142 \blacksquare 214 = 14$

IV. $816 \blacksquare 213 = 21$

V. $(625 \blacksquare 213) \bullet (184 \bullet 271) = ?$

A) 32

B) 24

C) 18

D) 16

E) 7

9. I. $5 \square = 1025$

II. $7 \square = 1449$

III. $9 \square = 1881$

IV. $4 \square = ?$

A) 168

B) 618

C) 861

D) 816

E) 186

10. I. $8 \blacktriangle 7 = 1$

II. $7 \blacktriangle 4 = 9$

III. $10 \blacktriangle 5 = 25$

IV. $9 \blacktriangle 3 = ?$

A) 12

B) 22

C) 25

D) 27

E) 36

11. I. $4 \blacktriangle 5 = 36; 45$

II. $2 \blacktriangle 8 = 20; 80$

III. $3 \blacktriangle 7 = 30; 70$

IV. $3 \blacktriangle 6 = ?; ?$

A) 24, 24

B) 24, 25

C) 27, 54

D) 24, 54

E) 27, 36

12. I. $\bullet 10 = 4$

II. $\bullet 8 = 3$

III. $\bullet 6 = 2$

IV. $\bullet 20 = ?$

A) 7

B) 8

C) 9

D) 10

E) 11



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	B	C	A	E	C	D	E	D	E	C	C

1. I. $\blacksquare \blacksquare 5 = 4$

II. $4 \blacksquare 7 = 5$

III. $6 \blacksquare 9 = 9$

IV. $5 \blacksquare 11 = ?$

A) 0

B) 1

C) 2

D) 3

E) 4

2. I. $\blacksquare \blacksquare 74 = 11, 28$

II. $55 \square = 10, 25, 0$

III. $\blacksquare \blacksquare 97 \square = 16, 63, \square = 9, 18, 3$

IV. $\blacksquare \blacksquare 99 \square = 18, 81, \square = ?$

A) 9, 8, 9

B) 8, 9, 7

C) 9, 8, 7

D) 7, 8, 9

E) 7, 9, 8

3. I. $\star 517 = 67$

II. $\square 438 = 843$

III. $\star 465 \square = 105 \square = 510$

IV. $\star 736 \square = ?$

A) 510

B) 610

C) 160

D) 105

E) 106

4. I. $5 \bullet 4 = 10, 9, 8$

II. $3 \bullet 6 = 6, 9, 12$

III. $7 \bullet 1 = 14, 8, 2$

IV. $8 \bullet 3 = ?$

A) 16, 8, 6

B) 18, 11, 6

C) 16, 8, 3

D) 16, 11, 6

E) 18, 11, 8

5. I. $5 \blacksquare = 125, 25, 150$

II. $4 \blacksquare = 64, 16, 80$

III. $3 \blacksquare = 27, 9, 36$

IV. $2 \blacksquare = ?$

A) 4, 8, 12

B) 8, 2, 12

C) 8, 4, 12

D) 8, 12, 4

E) 12, 8, 4

6. I. $5 \bullet 3 = \frac{8}{15}$

II. $1 \bullet 2 = \frac{3}{2}$

III. $2 \bullet 3 = \frac{5}{6}$

IV. $\frac{1}{2} \bullet \frac{1}{4} = ?$

A) 3

B) 4

C) 5

D) 6

E) 8

7. I. $a \bullet b = \frac{a^2}{3b}$

II. $a \blacksquare b = a + b^2$

III. $(6 \bullet 4) \blacksquare 4 = ?$

A) 19

B) 18

C) 17

D) 16

E) 15

8. I. $a \blacktriangle b = \frac{a}{b} + \frac{b}{a}$

II. $a \blacksquare b = \frac{a}{b} - \frac{b}{a}$

III. $(2 \blacktriangle 1) \blacktriangle (2 \blacksquare 1) = ?$

A) $\frac{27}{31}$

B) $\frac{39}{19}$

C) $\frac{34}{21}$

D) $\frac{34}{15}$

E) $\frac{63}{17}$

9. I. $36 \square 81 = 6; 9; 15$

II. $49 \square 169 = 7; 13; 20$

III. $144 \square 64 = ?; ?; ?$

A) 12, 9, 20

B) 9, 10, 19

C) 12, 8, 20

D) 9, 8, 72

E) 12, 9, 36

10. I. $a \blacktriangle b = (a \blacksquare b) - 1$

II. $a \blacksquare b = a \cdot (b + 2)$

III. $3 \blacktriangle 2 = ?$

A) 8

B) 9

C) 10

D) 11

E) 12

11. I. $a \star b = 2(a \blacktriangle b)$

II. $a \blacktriangle b = \frac{a \blacksquare b}{2}$

III. $a \blacksquare b = a + b + 2$

IV. $4 \star 8 = ?$

A) 8

B) 10

C) 12

D) 14

E) 16

METROPOL YAYINLARI • METROPOL PUBLICATIONS

12. I. $4 \bullet 3 = \frac{12}{7}$

II. $5 \bullet 4 = \frac{20}{9}$

III. $6 \bullet 2 = \frac{3}{2}$

IV. $a \bullet \frac{1}{b} = ?$

A) $\frac{a+b}{ab-1}$

B) $\frac{a}{ab+1}$

C) $\frac{b}{ab+a}$

D) $\frac{b}{ab+1}$

E) $\frac{a}{ab+b}$

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	C	B	D	C	D	A	D	C	D	D	B

1. I. $64 \bullet 32 = 18$

II. $97 \bullet 39 = 36$

III. $86 \bullet 54 = 28$

IV. $69 \bullet 36 = ?$

A) 28

B) 32

C) 36

D) 40

E) 44

2. I. $986 \bullet 543 = 11$

II. $399 \bullet 712 = 11$

III. $687 \bullet 334 = 11$

IV. $871 \bullet 523 = ?$

A) 5

B) 6

C) 7

D) 8

E) 9

3. I. $9755 * = 6$

II. $8639 * = 2$

III. $5864 * = 3$

IV. $7853 * = ?$

A) 6

B) 7

C) 8

D) 9

E) 10

4. I. $48 \bullet 14 = 68$

II. $64 \bullet 19 = 90$

III. $78 \bullet 27 = 102$

IV. $93 \bullet 42 = ?$

A) 34

B) 56

C) 74

D) 96

E) 102

5. I. $98876 * = 19$

II. $57688 * = 17$

III. $43298 * = 13$

IV. $58463 * = ?$

A) 12

B) 13

C) 14

D) 15

E) 16

METROPOL YAYINLARI • METROPOL PUBLICATIONS

6. I. $7 \square 5 = 29$

II. $6 \square 11 = 45$

III. $12 \square 4 = 36$

IV. $15 \square 3 = ?$

A) 36

B) 37

C) 38

D) 39

E) 40

7. I. $36 * 9 = 16$

II. $27 * 3 = 81$

III. $16 * 8 = 4$

IV. $45 * 9 = ?$

A) 16

B) 25

C) 36

D) 49

E) 64

8. I. $74 * 98 = 100$

II. $62 * 54 = 32$

III. $49 * 23 = 42$

IV. $82 * 19 = ?$

A) 21

B) 22

C) 23

D) 24

E) 25

9. I. $987 \heartsuit 453 = 12$

II. $695 \heartsuit 143 = 12$

III. $768 \heartsuit 224 = 13$

IV. $888 \heartsuit 334 = ?$

A) 10

B) 12

C) 14

D) 16

E) 18

10. I. $32 \clubsuit 45 = 26$

II. $63 \clubsuit 18 = 26$

III. $46 \clubsuit 28 = 40$

IV. $56 \clubsuit 24 = ?$

A) 34

B) 36

C) 38

D) 40

E) 42

11. I. $6 \blacktriangle 9 = 45$

II. $8 \blacktriangle 5 = 35$

III. $7 \blacktriangle 8 = 48$

IV. $9 \blacktriangle 4 = ?$

A) 30

B) 31

C) 32

D) 33

E) 34

12. I. $3 \bullet (6 \bullet 3) = 0$

II. $6 \bullet (4 \bullet 4) = 6$

III. $4 \bullet (4 \bullet 3) = 3$

IV. $4 \bullet (5 \bullet 3) = ?$

A) 1

B) 2

C) 4

D) 5

E) 7

 YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	B	E	B	D	B	E	C	C	C	B

1. I. $4 \bullet 7 = 8 ; 5 ; 12$
 II. $3 \bullet 6 = 7 ; 4 ; 10$
 III. $5 \bullet 4 = 5 ; 6 ; 10$
 IV. $6 \bullet 8 = ? ; ? ; ?$
 A) 7; 5; 16
 B) 8; 5; 16
 C) 8; 5; 14
 D) 9; 6; 14
 E) 9; 7; 15

2. I. $13 \bullet 7 = 36$
 II. $21 \bullet 10 = 121$
 III. $13 \bullet 5 = 64$
 IV. $9 \bullet 3 = ?$
 A) 72
 B) 42
 C) 25
 D) 36
 E) 18

3. I. $6 \triangle 3 = 3 ; 18$
 II. $9 \triangle 5 = 4 ; 45$
 III. $7 \triangle 3 = 4 ; 21$
 IV. $8 \triangle 8 = ? ; ?$
 A) 0; 16
 B) 0; 64
 C) 2; 72
 D) 16; 64
 E) 3; 16

4. I. $9 \blacktriangle 5 = 16, 64$
 II. $6 \blacktriangle 3 = 9, 27$
 III. $8 \blacktriangle 4 = 16, 64$
 IV. $12 \blacktriangle 8 = ? , ?$
 A) 16; 64
 B) 16; 96
 C) 12; 32
 D) 12; 64
 E) 18; 96

5. I. $5 \blacktriangle 2 = (3, 7, 10)$
 II. $4 \blacktriangle 3 = (1, 7, 8)$
 III. $2 \blacktriangle 1 = (1, 3, 4)$
 IV. $3 \blacktriangle 1 = ?$
 A) (2, 4, 6)
 B) (2, 4, 3)
 C) (1, 2, 3)
 D) (3, 2, 6)
 E) (2, 3, 6)

6. I. $\blacktriangle A = a$
 II. $\blacksquare b = B$
 III. $E \blacktriangledown A = ?$
 A) $\blacktriangle E \blacksquare d \blacksquare a$
 B) $\blacksquare e \blacktriangle D \blacktriangle A$
 C) $\blacktriangle e \blacktriangle D \blacksquare a$
 D) $\blacksquare e \blacktriangle D \blacksquare a$
 E) $\blacksquare e \blacksquare d \blacktriangle A$

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7. I. $931 \blacksquare = 67 \blacksquare$
 II. $28 \blacksquare = 181 \blacksquare$
 III. $151 \blacksquare = 25 \blacksquare$
 IV. $970 \blacksquare = ? \blacksquare$

A) 351
 B) 466
 C) 554
 D) 693
 E) 864

8. I. $\blacktriangle 712 = 73$
 II. $\blacktriangle 821 = 83$
 III. $\blacktriangle 314 = ?$

A) 31
 B) 33
 C) 35
 D) 34
 E) 41

9. I. $\bullet 514 = 59$
 II. $\bullet 312 = 35$
 III. $\bullet 612 = ?$

A) 45
 B) 68
 C) 74
 D) 75
 E) 85

10. I. $\blacksquare 814 = 148$
 II. $245 \blacktriangle = 265$
 III. $\blacksquare 415 \blacktriangle = ?$

A) 154
 B) 145
 C) 541
 D) 214
 E) 164

11. I. $\blacktriangle 253 = 325$
 II. $124 \bullet = 34$
 III. $\blacktriangle 432 = 243 \bullet = 63$
 IV. $\blacktriangle 167 \bullet = 86$
 V. $\blacktriangle 236 \bullet = ?$

A) 29
 B) 46
 C) 81
 D) 83
 E) 92

12. I. $\bullet 452 = 245$ $165 \blacksquare = 75$
 II. $\bullet 163 = 316$ $\blacksquare = 46$
 III. $(\bullet 294) \blacksquare = ?$

A) 59
 B) 69
 C) 96
 D) 49
 E) 94

METROPOL YAYINLARI • METROPOL PUBLICATIONS

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	D	B	A	A	D	B	C	B	E	D	B

I. $36 \blacksquare = 6$

II. $(138 \star) = 124$

III. $121 \blacksquare = 11$

IV. $(239 \star) \blacksquare = ?$

A) 9

B) 11

C) 13

D) 15

E) 17

2. I. $2 \bullet 3 = 4 : 6 : 9$

II. $2 \bullet 1 = 4 : 2 : 1$

III. $1 \bullet 3 = 1 : 3 : 9$

IV. $1 \bullet 5 = ? : ? : ?$

A) 1, 2, 5

B) 2, 5, 5

C) 1, 5, 25

D) 2, 1, 25

E) 2, 5, 25

3. I. $\triangle 512 = 63$

II. $\triangle 402 = 42$

III. $\triangle 360 = ?$

A) 48

B) 63

C) 72

D) 96

E) 108

4. I. $\blacksquare 316 = 497$

II. $\blacksquare 423 = 675$

III. $\square 521 = 341$

IV. $\square 842 = 462$

V. $\blacksquare 420 = ... \square = ?$

A) 142

B) 242

C) 122

D) 221

E) 320

5. I. $\triangle 518 = 47$

II. $\triangle 635 = 32$

III. $\triangle 977 = 20$

IV. $\triangle 506 = ?$

A) 65

B) 60

C) 50

D) 56

E) 11

6. I. $\blacktriangle 347 = 473$

II. $\blacksquare 565 = 11$

III. $\blacktriangle 254 = 542 \blacksquare = 12$

IV. $\blacktriangle 628 \blacksquare = ?$

A) 62

B) 26

C) 20

D) 60

E) 06

METROPOL YAYINLARI - METROPOL PUBLICATIONS

7. I. $6 \square 4 = 20$

II. $4 \square 3 = 7$

III. $4 \square 2 = 12$

IV. $3 \square 1 = ?$

A) 9

B) 18

C) 6

D) 8

E) 21

8. I. $4 \bullet (4 \bullet 2) = 2$

II. $10 \bullet (15 \bullet 3) = 2$

III. $8 \bullet (12 \bullet 3) = 2$

IV. $9 \bullet (6 \bullet 2) = ?$

A) 2

B) 3

C) 6

D) 9

E) 18

9. I. $4 \square 3 = 25$

II. $5 \square 6 = 61$

III. $7 \square 8 = 113$

IV. $9 \square 4 = ?$

A) 93

B) 94

C) 95

D) 96

E) 97

10. I. $14 \square 12 = 12$

II. $23 \square 18 = 4$

III. $42 \square 8 = 0$

IV. $64 \square 12 = ?$

A) 24

B) 30

C) 36

D) 42

E) 48

11. I. $16 \heartsuit 12 = 7$

II. $18 \heartsuit 26 = 11$

III. $18 \heartsuit 30 = 12$

IV. $10 \heartsuit 14 = ?$

A) 6

B) 7

C) 8

D) 9

E) 10

12. I. $8 \blacktriangle 7 = 1$

II. $7 \blacktriangle 4 = 9$

III. $10 \blacktriangle 5 = 25$

IV. $9 \blacktriangle 3 = ?$

A) 12

B) 22

C) 27

D) 36

E) 42

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	C	D	B	D	A	D	B	E	D	A	D

1. I. $24 \star 18 = 14$

II. $16 \star 17 = 11$

III. $22 \star 17 = 13$

IV. $14 \star 10 = ?$

A) 6

B) 8

C) 10

D) 12

E) 14

2. I. $16 \heartsuit 12 = 10$

II. $18 \heartsuit 32 = 5$

III. $23 \heartsuit 15 = 11$

IV. $17 \heartsuit 19 = ?$

A) 7

B) 8

C) 9

D) 10

E) 11

3. I. $6 \star 10 = 20$

II. $9 \star 12 = 36$

III. $6 \star 14 = 28$

IV. $8 \star 6 = ?$

A) 12

B) 14

C) 16

D) 18

E) 20

4. I. $7 \circ 25 = 24$

II. $6 \circ 18 = 18$

III. $9 \circ 23 = 58$

IV. $5 \circ 12 = ?$

A) 12

B) 13

C) 14

D) 15

E) 16

5. I. $7 * 4 = 17$

II. $6 * 6 = 12$

III. $5 * 7 = 8$

IV. $8 * 5 = ?$

A) 16

B) 17

C) 18

D) 19

E) 20

6. I. $4 \Leftrightarrow 14 = 50$

II. $5 \Leftrightarrow 42 = 83$

III. $2 \Leftrightarrow 3 = 5$

IV. $3 \Leftrightarrow 14 = ?$

A) 13

B) 14

C) 15

D) 16

E) 17

METROPOL YAYINLARI METROPOL PUBLICATIONS

7. I. $19 \times 17 = 6$

II. $23 \times 26 = 7$

III. $9 \times 16 = 5$

IV. $38 \times 26 = ?$

A) 2

B) 4

C) 6

D) 8

E) 10

8. I. $234 * 326 = 60$

II. $451 * 426 = 68$

III. $332 * 542 = 58$

IV. $621 * 823 = ?$

A) 60

B) 62

C) 64

D) 66

E) 68

9. I. $a \odot b = a + 2 \cdot b - 1$

II. $a \blacktriangle b = a - b + 7$

III. $(4 \odot 6) \odot (2 \blacktriangle 5) = ?$

A) 19

B) 20

C) 21

D) 22

E) 23

10. I. $a \bowtie b = 2a + b$

II. $a \bowtie b = a + b^2 + 3$

III. $(5 \bowtie 3) \bowtie (2 \bowtie 6) = ?$

A) 37

B) 62

C) 75

D) 81

E) 96

11. I. $a \star b = 3a + 2b$

II. $a \star b = 2a + 3b$

III. $a \diamond b = 2(a - b)$

IV. $(4 \star 6) \diamond (3 \star 4) = ?$

A) 6

B) 8

C) 10

D) 12

E) 14

12. I. $a \spadesuit b = \frac{a+b}{2}$

II. $a \clubsuit b = \frac{3 \cdot (a+b)}{4}$

III. $a \heartsuit b = \frac{a^2 + b^2}{3}$

IV. $(7 \spadesuit 21) \clubsuit (3 \heartsuit 3) = ?$

A) 6

B) 9

C) 12

D) 15

E) 18


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	C	B	D	A	D	A	D	C	D	D

1. I. $23 \blacktriangle 32 = 55$

II. $41 \blacktriangle 26 = 58$

III. $17 \blacktriangle 53 = 88$

IV. $94 \blacktriangle 35 = ?$

A) 18

B) 63

C) 108

D) 129

E) 138

2. I. $3 \triangle 8 = 11$

II. $14 \triangle 19 = 11$

III. $89 \triangle 18 = 8$

IV. $37 \triangle 56 = ?$

A) 3

B) 4

C) 5

D) 6

E) 7

3. I. $4 \bullet 12 = 7$

II. $5 \bullet 14 = 10$

III. $12 \bullet 6 = 9$

IV. $18 \bullet 7 = ?$

A) 3

B) 5

C) 7

D) 9

E) 11

4. I. $16 \circledast 16 = 6$

II. $53 \circledast 22 = 35$

III. $17 \circledast 19 = 18$

IV. $63 \circledast 14 = ?$

A) 24

B) 27

C) 32

D) 36

E) 49

5. I. $\blacktriangle 32 = 25$

II. $\blacktriangle 11 = 4$

III. $\blacksquare 74 = 9$

IV. $\blacksquare 82 = 36$

V. $\blacktriangle 42 - (\blacksquare 73 - \blacktriangle 21) = ?$

A) 64

B) 48

C) 44

D) 42

E) 29

6. I. $6 \square 2 = 12 \square 4$

II. $15 \square 3 = 25 \square 5$

III. $27 \square 3 = ?$

A) $18 \square 3$

B) $21 \square 7$

C) $30 \square 6$

D) $32 \square 4$

E) $36 \square 4$

METROPOL YAYINLARI • METROPOL PUBLICATIONS

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7. I. $3 \square 5 = 12 \triangle 4$
 II. $15 \square 4 = 30 \triangle 11$
 III. $(50 \triangle 40) \square 8 = ?$

A) 18
 B) 12
 C) 8
 D) 2
 E) 0

8. I. $* \triangle = \triangle \triangle$
 II. $\star \circ = \circ \circ \circ$
 III. $\star (*5 + 47) = ?$

A) 24
 B) 88
 C) 171
 D) 282
 E) 666

9. I. $\triangle 100 = 200$
 II. $\square 500 = 250$
 III. $\triangle 400 + \square 700 = ?$

A) 1250
 B) 1150
 C) 1025
 D) 1000
 E) 950

10. I. $\triangle 976 = 865$

II. $\circ 751 = 862$

III. $\triangle 766 + \circ 200 = ?$

A) 966
 B) 965
 C) 964
 D) 963
 E) 962

11. I. $2, 9 = 81$
 II. $3, 4 = 64$
 III. $2, 25 = 625$
 IV. $3, 2 = 8$
 V. $3, 5 = ?$

A) 255
 B) 225
 C) 125
 D) 75
 E) 15

METROPOL YAYINLARI METROPOL PUBLICATIONS

12. I. $16 \blacksquare = 5,7$

II. $\oplus 48 = 32$

III. $\oplus 47 \blacksquare = 18 \blacksquare = 7,9$

IV. $\oplus 27 \blacksquare = ?$

A) 5,5
 B) 6,11
 C) 7,11
 D) 6,9
 E) 10,9

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
E	C	C	E	E	E	A	C	B	A	C	A

1. I. $5 \square = 1025$

II. $7 \square = 1449$

III. $9 \square = 1881$

IV. $4 \square = ?$

A) 968

B) 861

C) 816

D) 186

E) 168

2. I. $27 \boxtimes 18 = 2178$

II. $98 \boxtimes 42 = 9482$

III. $45 \boxtimes 64 = 4654$

IV. $57 \boxtimes 85 = ?$

A) 5785

B) 5578

C) 5875

D) 8565

E) 5878

3. I. $49 \square 81 = 63$

II. $64 \square 25 = 40$

III. $9 \square 121 = ?$

A) 24

B) 33

C) 44

D) 54

E) 64

4. I. $8 \star 4 = 48$

II. $12 \star 6 = 108$

III. $10 \star 4 = 84$

IV. $5 \star 3 = ?$

A) 9

B) 16

C) 64

D) 72

E) 96

5. I. $5 \triangle = 9, 11$

II. $10 \triangle = 19, 21$

III. $\square 52 = 10$

IV. $\square 34 \triangle = ?$

A) 7,9

B) 14,16

C) 17,18

D) 21,22

E) 23,25

6. I. $12 \blacksquare = 36$

II. $41 \blacksquare = 510$

III. $22 \blacksquare = 48$

IV. $23 \blacksquare = ?$

A) 105

B) 115

C) 510

D) 705

E) 805

METROPOL YAYINLARI METROPOL PUBLICATIONS

Bölüm / Chapter 4

7. I. $7 \bullet 9 \star 4 = 64$

II. $5 \bullet 8 \star 5 = 65$

III. $6 \star 4 \bullet 2 = 26$

IV. $8 \star 3 \bullet 6 = ?$

A) 30

B) 66

C) 72

D) 82

E) 101

8. I. $\square 21 = 9, 1$

II. $\square 53 = 64, 4$

III. $\square 72 = 81, 25$

IV. $\square 93 = ?$

A) 37, 3

B) 144, 36

C) 36, 9

D) 81, 9

E) 144, 6

9. I. $a \square \rightarrow a + 2$

II. $(a \square) \triangle \rightarrow 3a + 6$

III. $(9 \triangle) \square \rightarrow ?$

A) 23

B) 25

C) 27

D) 29

E) 31

10. I. $1 \square 12 = 12$

II. $9 \square 8 = 8$

III. $29 \square 17 = 17$

IV. $[(8 \square 6) \square (9 \square 4)] \square 12 = ?$

A) 6

B) 4

C) 9

D) 12

E) 14

11. I. $40 \square = 16$

II. $20 \square = 4$

III. $44 \square = ?$

A) 108

B) 96

C) 72

D) 64

E) 48

12. I. $a \triangle = a + 2$

II. $a \square = 2 \bullet a$

III. $7 \triangle \square - 7 \square \triangle = ?$

A) 1

B) 2

C) 3

D) 4

E) 5



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	C	B	B	E	C	A	B	D	D	D	B

1. I. $34 \star 12 = 21$

II. $62 \star 13 = 32$

III. $11 \star 33 = 12$

IV. $54 \star 14 = ?$

A) 64

B) 53

C) 45

D) 36

E) 30

2. I. $\star 5 = 4$

II. $\bullet 3 = 4$

III. $\star\star\bullet 4 = ?$

A) 3

B) 4

C) 5

D) 6

E) 7

3. I. $36 \square = 6$

II. $(140 \star) = 124$

III. $(160 \star) \square = ?$

A) 11

B) 12

C) 15

D) 16

E) 25

4. I. $68 \square 45 = 21$

II. $34 \square 68 = 12$

III. $17 \square 11 = 60$

IV. $36 \square 24 = ?$

A) 15

B) 27

C) 32

D) 40

E) 64

5. I. $2 \blacktriangle 3 = 1; 5; 6$

II. $5 \blacktriangle 12 = 7; 17; 60$

III. $4 \blacktriangle 9 = 5; 13; 36$

IV. $4 \blacktriangle 4 = ?; ?; ?$

A) 4; 8; 12

B) 0; 8; 16

C) 4; 8; 16

D) 0; 4; 12

E) 1; 8; 16

6. I. $4 \bullet 5 = 1; 18$

II. $6 \bullet 9 = 3; 30$

III. $2 \bullet 3 = 1; 10$

IV. $4 \bullet 9 = ?; ?$

A) 5; 24

B) 5; 13

C) 13; 36

D) 13; 72

E) 5; 26

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7. I. $4 \blacksquare 2 = 4$

II. $8 \blacksquare 3 = 25$

III. $9 \blacksquare 2 = 49$

IV. $6 \blacksquare 5 = ?$

A) 1

B) 4

C) 9

D) 16

E) 30

8. I. $4 \blacktriangle 5 = 16$

II. $6 \blacktriangle 8 = 42$

III. $3 \blacktriangle 9 = 24$

IV. $6 \blacktriangle 4 = ?$

A) 14

B) 15

C) 16

D) 17

E) 18

9. I. $44 \bigtriangleup 2 = 36$

II. $51 \bigtriangleup 3 = 24$

III. $80 \bigtriangleup 4 = ?$

A) 16

B) 32

C) 54

D) 72

E) 80

10. I. $126 = 9, 3$

II. $135 = 9, 1$

III. $148 = ?$

A) 12, 2

B) 13, 7

C) 13, 3

D) 13, 8

E) 13, 4

11. I. $12 \star 11 = 20$

II. $26 \star 18 = 41$

III. $5 \star 8 = 10$

IV. $17 \star 10 = ?$

A) 33

B) 34

C) 28

D) 24

E) 19

METROPOL YAYINLARI / METROPOL PUBLICATIONS

12. I. $2438 \blacksquare = 8342$

II. $2438 \bullet = 2348$

III. (KLMN \blacksquare) $\bullet = ?$

A) NMKL

B) NLMK

C) KLMN

D) NKLM

E) LMKN



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	A	B	C	B	E	A	E	A	C	D	B

1. I. $5 \star 2 = (3, 7, 10)$

II. $4 \star 3 = (1, 7, 8)$

III. $2 \star 1 = (1, 3, 4)$

IV. $3 \star 1 = ?$

A) $(2, 4, 6)$

B) $(2, 4, 3)$

C) $(1, 2, 3)$

D) $(3, 2, 6)$

E) $(2, 3, 6)$

2. I. $4 \diamond 7 = 14$

II. $5 \diamond 9 = 17$

III. $3 \diamond 6 = 12$

IV. $6 \diamond 2 = ?$

A) 15

B) 13

C) 11

D) 9

E) 7

3. I. $12 \clubsuit 4 = 24$

II. $16 \clubsuit 10 = 18$

III. $29 \clubsuit 20 = 27$

IV. $34 \clubsuit 26 = ?$

A) 18

B) 22

C) 24

D) 28

E) 36

METROPOL YAYINLARI • METROPOL PUBLICATIONS

5. I. $8195 \bullet = 845$

II. $4263 \bullet = 818$

III. $2244 \bullet = 416$

IV. $5172 \bullet = ?$

A) 510

B) 512

C) 514

D) 516

E) 518

6. I. $438 \star = 348$

II. $635 \blacksquare = 356$

III. $274 \blacktriangle = 247$

IV. $((983 \star) \blacksquare) \blacktriangle = ?$

A) 398

B) 839

C) 893

D) 938

E) 983

- 7.** I. $2 \triangleright 3 = 35$
 II. $4 \triangleright 2 = 72$
 III. $5 \triangleright 2 = 133$
 IV. $1 \triangleright 4 = ?$
- A) 26
 B) 37
 C) 50
 D) 65
 E) 126
- 8.** I. $\star 325 = 10$
 II. $\bullet 27 = 14$
 III. $\bullet (\star 987) = \bullet 24 = 8$
 IV. $\star (\bullet 87) = ?$
- A) 5
 B) 7
 C) 8
 D) 11
 E) 15
- 9.** I. $2 \blacksquare 3 = 5,6$
 II. $4 \blacksquare 2 = 6,8$
 III. $5 \blacksquare 1 = ?$
- A) 5,5
 B) 6,5
 C) 5,6
 D) 6,2
 E) 6,6

- 10.** I. $4 \triangleleft 7 = 19$
 II. $5 \triangleleft 9 = 24$
 III. $11 \triangleleft 12 = 45$
 IV. $14 \triangleleft 6 = ?$
- A) 28
 B) 32
 C) 36
 D) 42
 E) 48

- 11.** I. $69 \square 84 = 3$
 II. $98 \square 23 = 12$
 III. $29 \square 61 = 4$
 IV. $47 \square 13 = ?$
- A) 6
 B) 7
 C) 8
 D) 9
 E) 10

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- 12.** I. $a \triangle = 4a + 2$
 II. $a \square = \frac{3a}{2}$
 III. $(4 \triangle) \square = ?$
- A) 27
 B) 36
 C) 54
 D) 81
 E) 96



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	C	D	C	E	D	D	B	E	B	A

BÖLÜM

05

CHAPTER

Bölüm / Chapter 5

Sayı Şekil İlişkileri / Number Figure Relations

Test 1

- 1.
- | | | |
|---------|---------|----------|
| I.
 | II.
 | III.
 |
| IV.
 | V.
 | |
- A) 46 B) 47 C) 48 D) 49 E) 50

- 2.
- | | | |
|---------|---------|----------|
| I.
 | II.
 | III.
 |
| IV.
 | V.
 | |
- A) 39 B) 42 C) 45 D) 48 E) 51

- 3.
- | | | |
|--------|---------|----------|
| I.
 | II.
 | III.
 |
|--------|---------|----------|
- A) 4 B) 5 C) 6 D) 7 E) 8

SAYI ŞEKİL İLİŞKİLERİ NUMBER FIGURE RELATIONS

Sayı Şekil İlişkileri / Number Figure Relations

- 4.
- | | | |
|--------|---------|----------|
| I.
 | II.
 | III.
 |
|--------|---------|----------|

- A) 3 B) 4 C) 5 D) 6 E) 7

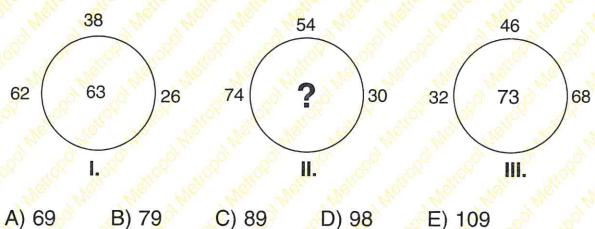
- 5.
- | | |
|----------|-----------|
| I.
 | → 6; 2; 5 |
| II.
 | → 8; 2; 6 |
| III.
 | → ?; ?; ? |

- A) 12; 1; 8 B) 10; 2; 8 C) 10; 1; 6
D) 12; 2; 8 E) 12; 1; 6

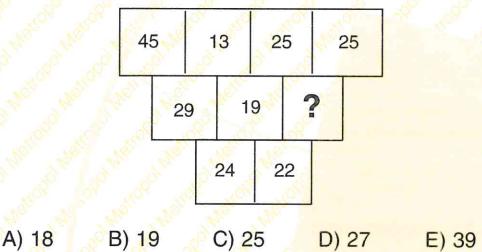
- 6.
- | | | |
|--------|---------|----------|
| I.
 | II.
 | III.
 |
|--------|---------|----------|

- A) 3 B) 4 C) 5 D) 6 E) 7

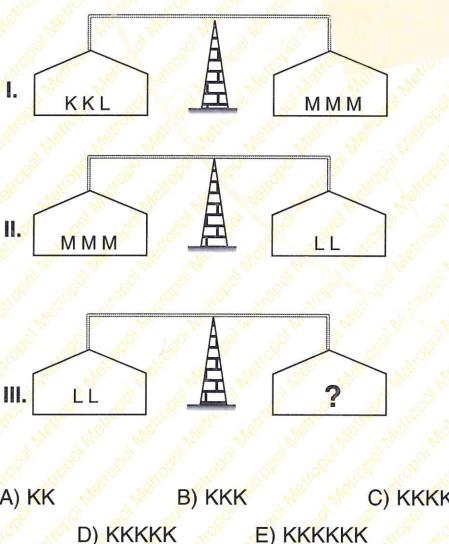
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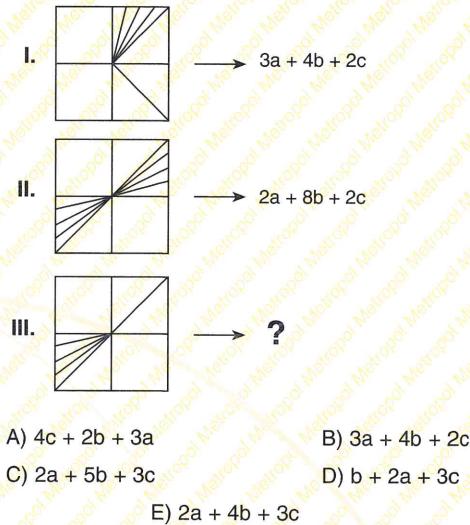
8.



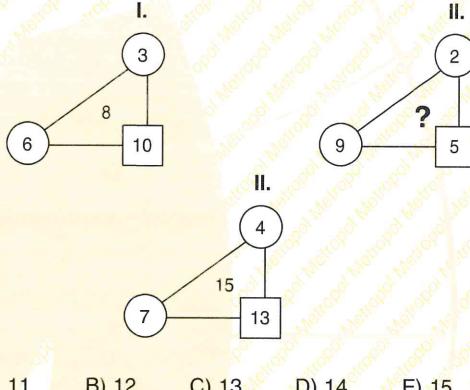
9.



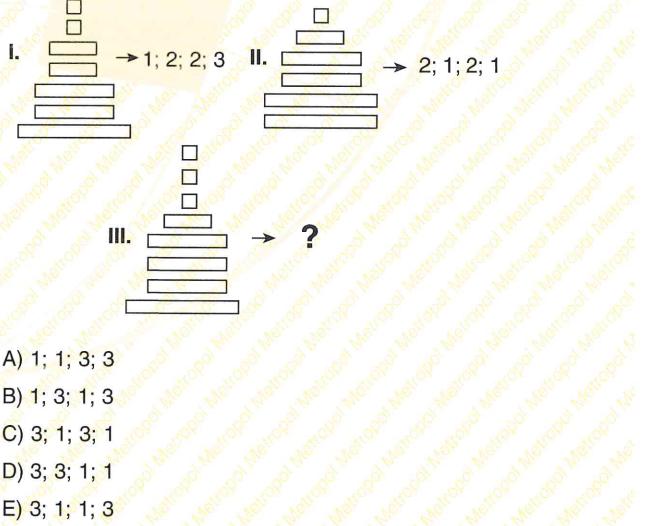
10.



11.



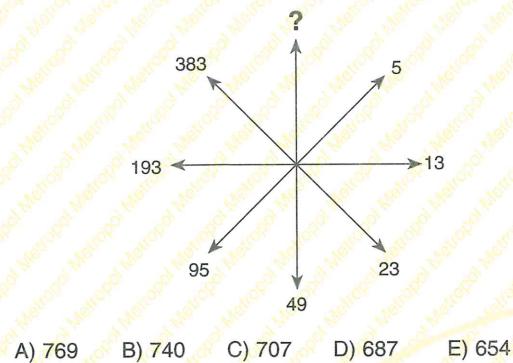
12.



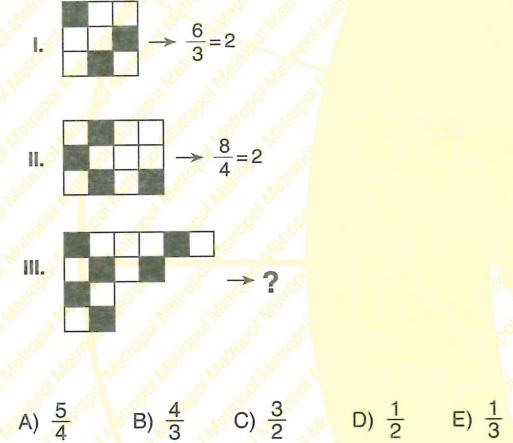
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	B	D	A	B	C	C	B	C	A

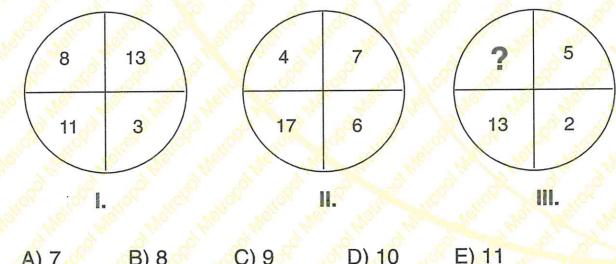
1.



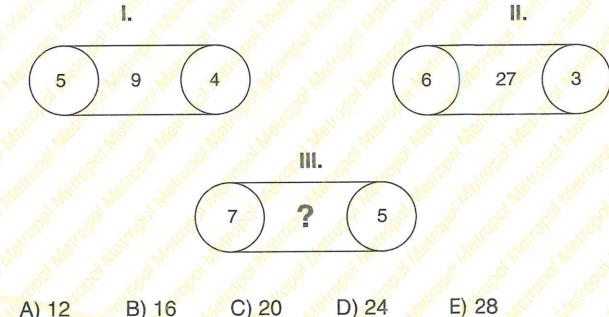
2.



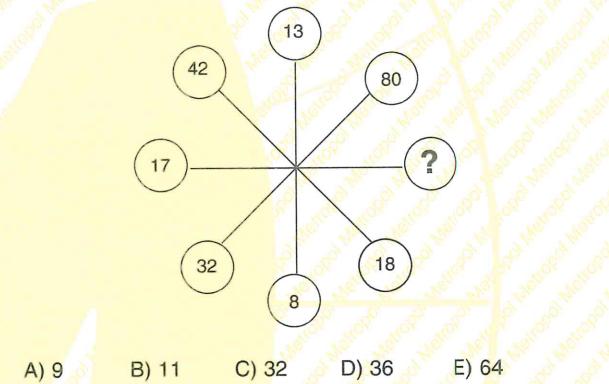
3.



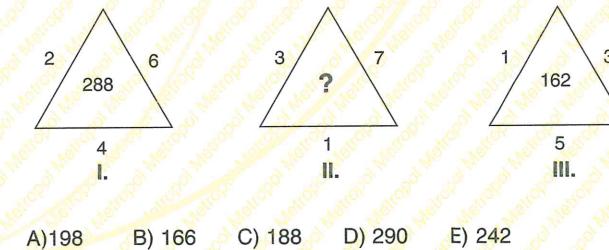
4.



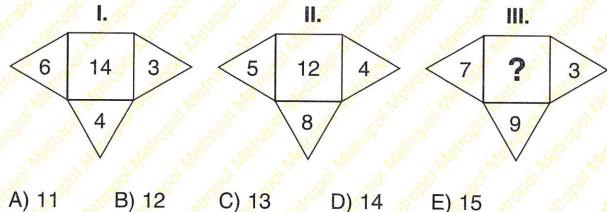
5.



6.

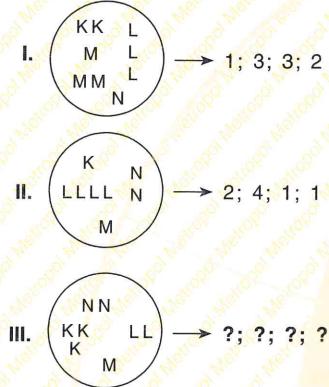


7.



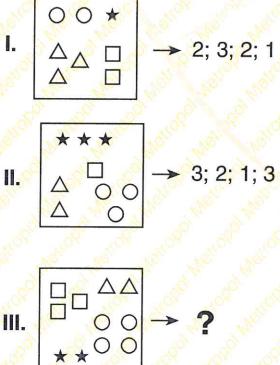
- A) 11 B) 12 C) 13 D) 14 E) 15

8.



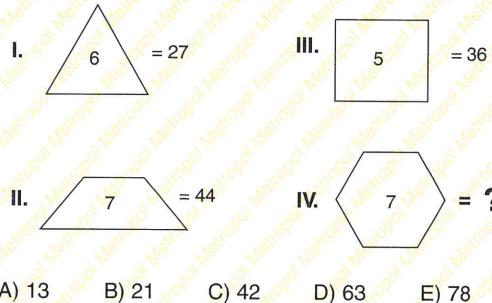
- A) 2; 2; 3; 1
B) 1; 3; 2; 2
C) 1; 2; 2; 1
D) 2; 3; 1; 2
E) 2; 2; 1; 3

9.



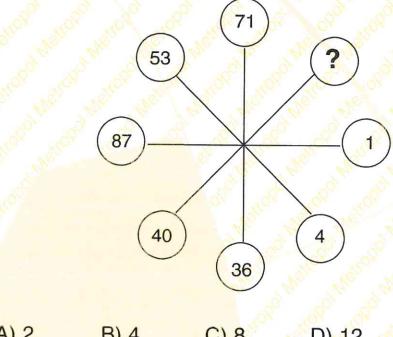
- A) 3; 4; 2; 2
B) 2; 2; 4; 3
C) 3; 2; 4; 2
D) 2; 4; 2; 3
E) 4; 2; 3; 2

10.



- A) 13 B) 21 C) 42 D) 63 E) 78

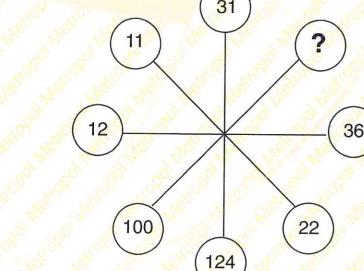
11.



- A) 2 B) 4 C) 8 D) 12 E) 16

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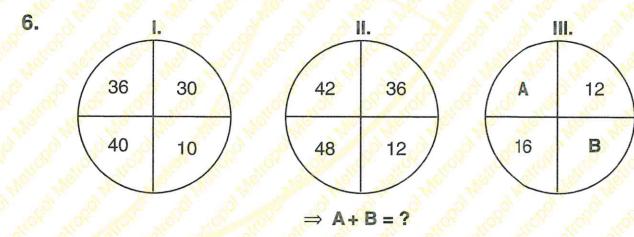
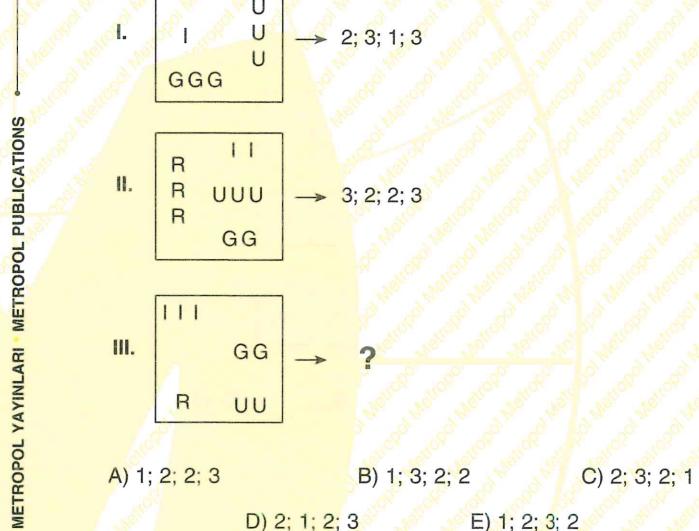
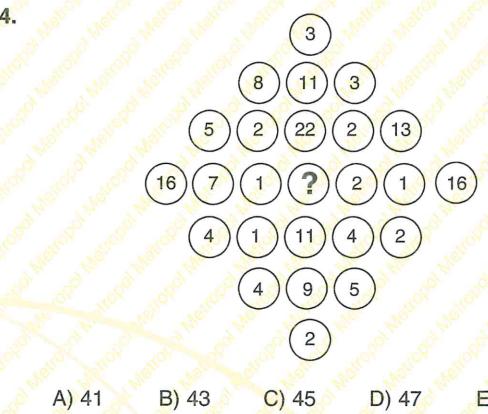
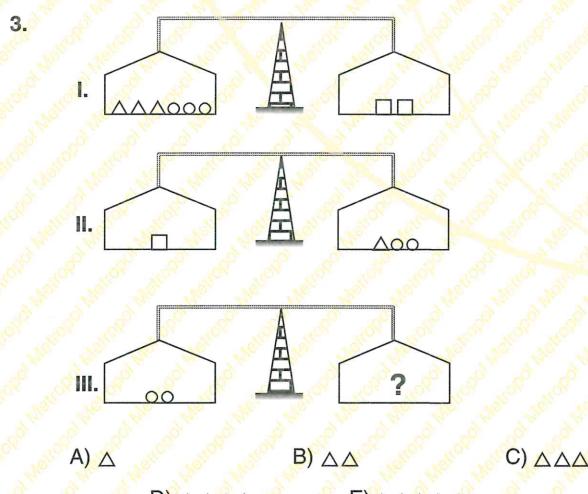
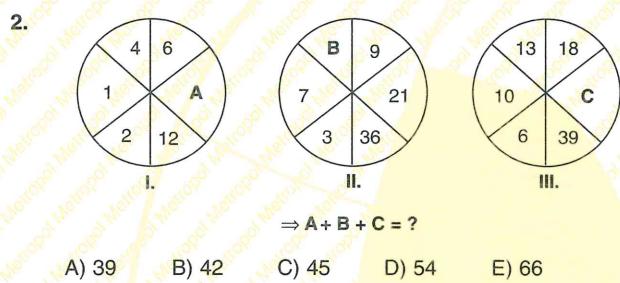
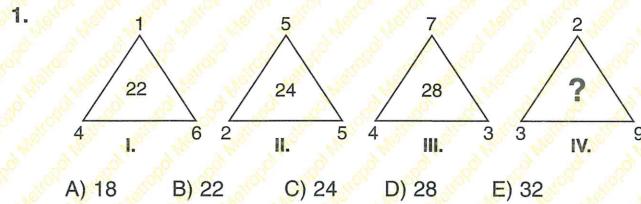
12.



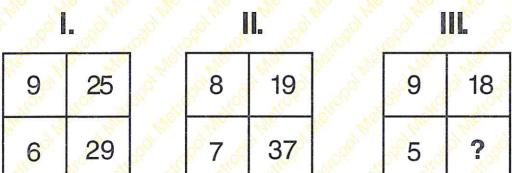
- A) 12 B) 48 C) 100 D) 120 E) 144

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	B	C	D	C	E	B	E	E	E	E	C

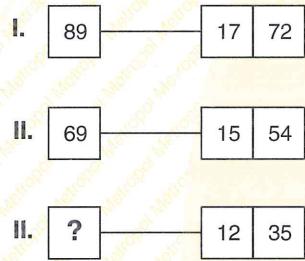


7.



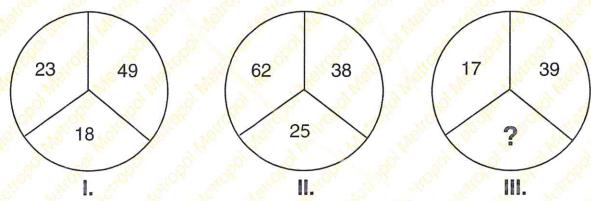
- A) 25 B) 26 C) 27 D) 28 E) 29

8.



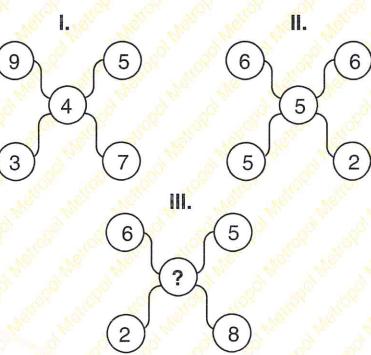
- A) 38 B) 39 C) 40 D) 41 E) 42

9.



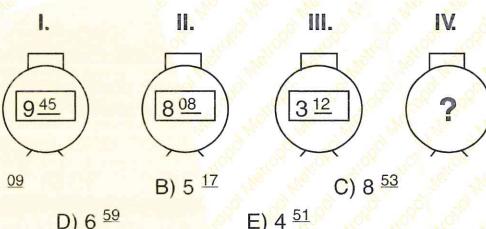
- A) 9 B) 12 C) 14 D) 16 E) 18

10.



- A) 0 B) 1 C) 4 D) 6 E) 7

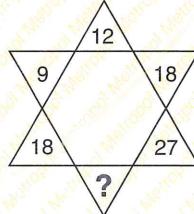
11.



- A) 1 09 B) 5 17 C) 8 53 D) 6 59 E) 4 51

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12.

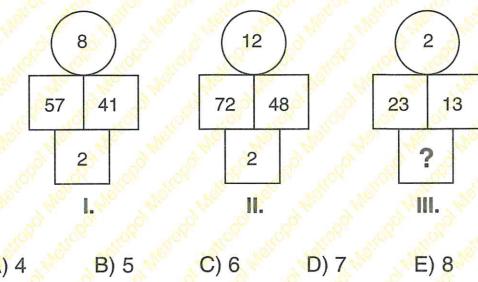


- A) 9 B) 15 C) 18 D) 24 E) 27

YANITLAR / ANSWERS

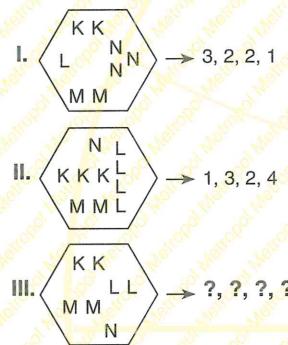
1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	B	E	B	C	A	C	B	C	D

1.



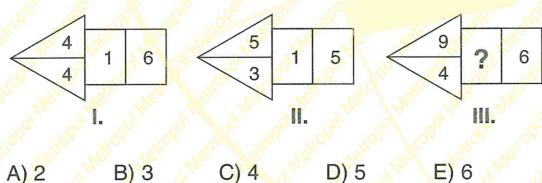
- A) 4 B) 5 C) 6 D) 7 E) 8

2.



- A) 1, 2, 2, 2 B) 2, 1, 2, 2 C) 2, 2, 1, 2
D) 2, 2, 2, 1 E) 2, 2, 2, 2

3.



- A) 2 B) 3 C) 4 D) 5 E) 6

4.

12	46	48	63
30	37	57	?

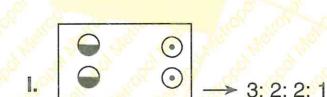
- A) 68 B) 76 C) 90 D) 94 E) 96

5.

8	24	42	56
2	4	6	7

- A) 3 B) 8 C) 10 D) 12 E) 14

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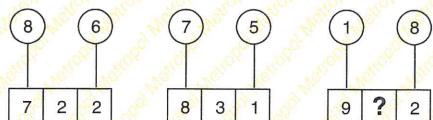
I. → 3; 2; 2; 1

II. → 2; 1; 3; 2

III. → ?; ?; ?; ?

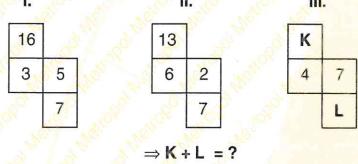
- A) 3; 3; 2; 1 B) 1; 3; 3; 2 C) 2; 3; 1; 3
D) 1; 3; 2; 3 E) 3; 3; 1; 2

7.



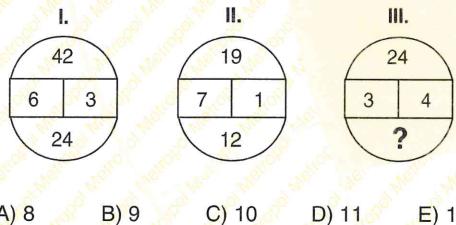
- A) 1
B) 2
C) 3
D) 4
E) 5

8.



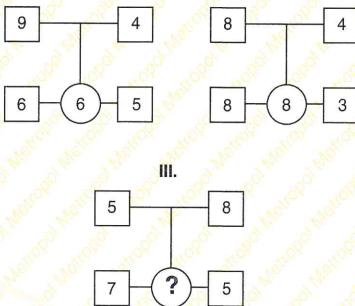
- A) 36 B) 37 C) 38 D) 39 E) 40

9.



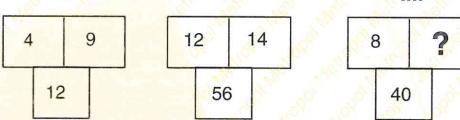
- A) 8 B) 9 C) 10 D) 11 E) 12

10.



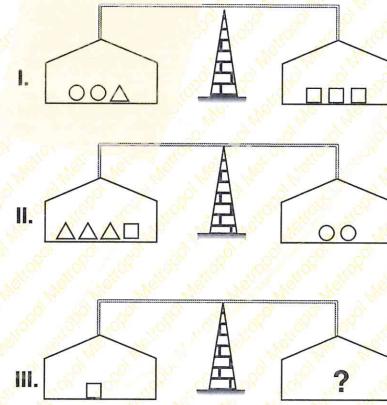
- A) 4 B) 5 C) 6 D) 7 E) 8

11.



- A) 5 B) 6 C) 10 D) 11 E) 15

12.

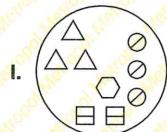
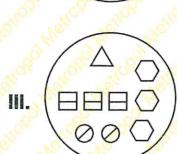


- A) $\triangle\circ$
B) $\triangle\triangle$
C) $\circ\circ$
D) $\circ\circ\triangle$
E) $\triangle\triangle\circ$

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	A	B	C	B	D	A	D	E	B	E	B

1.

 $\rightarrow 3; 3; 2; 1$  $\rightarrow 3; 1; 2; 2$  $\rightarrow ?$

A) 1; 2; 3; 3

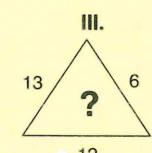
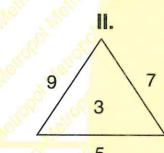
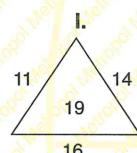
B) 3; 3; 2; 1

C) 2; 3; 3; 1

D) 1; 3; 2; 3

E) 2; 3; 1; 3

2.



A) 3

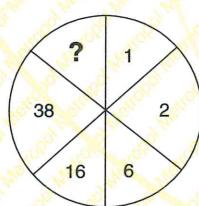
B) 5

C) 7

D) 9

E) 11

3.



A) 24

B) 48

C) 64

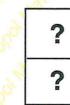
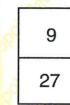
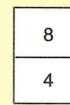
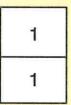
D) 72

E) 84

4.

A) 8
16B) 8
32C) 10
64D) 16
16E) 16
32

5.

A) 21
50B) 25
100C) 21
125D) 25
125E) 25
225

6.



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A)

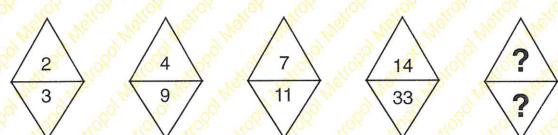
B)

C)

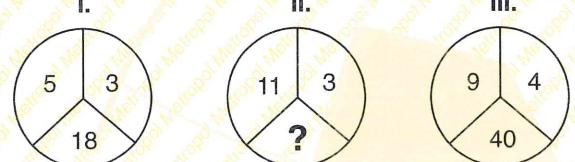
D)

E)

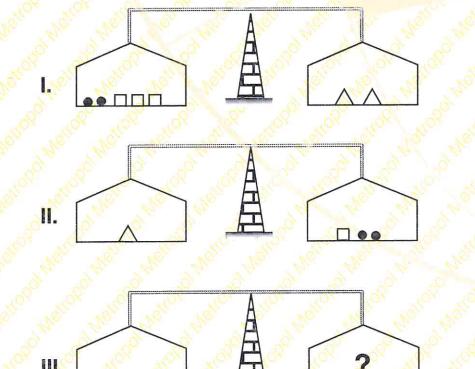
7.

- 
A) 17 B) 16 C) 17 D) 19 E) 20
 $\frac{34}{34}$ $\frac{38}{35}$ $\frac{35}{34}$ $\frac{34}{34}$ $\frac{37}{37}$

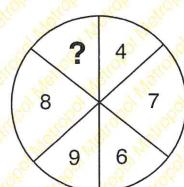
8.

- 
I. II. III.
A) 6 B) 8 C) 14 D) 27 E) 36

9.

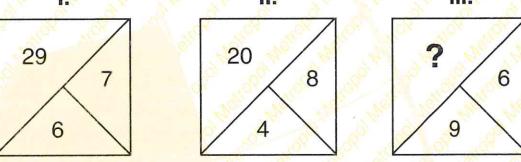
- 
I. II. III.
A) ● B) ●●● C) ●△
D) △●△ E) △●●

10.



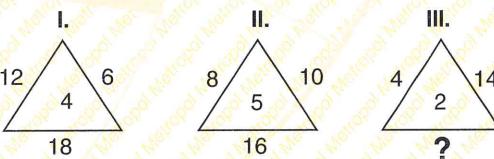
- A) 5 B) 6 C) 10 D) 11 E) 12

11.

- 
I. II. III.
A) 37 B) 38 C) 39 D) 40 E) 41

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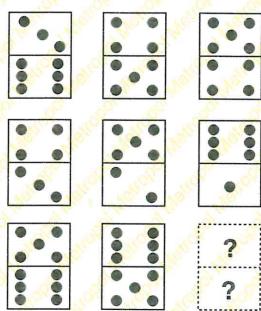
12.

- 
I. II. III.
A) 16 B) 18 C) 24 D) 28 E) 32

YANITLAR / ANSWERS

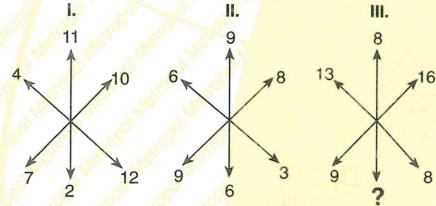
1	2	3	4	5	6	7	8	9	10	11	12
A	B	E	E	D	D	C	E	B	D	C	D

1.



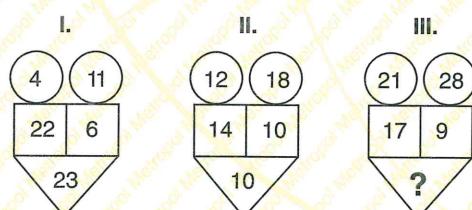
- A) B) C) D) E)

2.



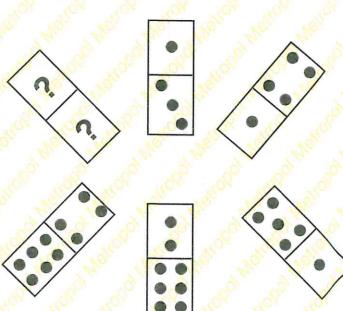
- A) 5 B) 9 C) 10 D) 11 E) 13

3.



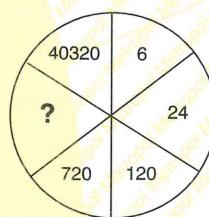
- A) 11 B) 12 C) 13 D) 14 E) 15

4.



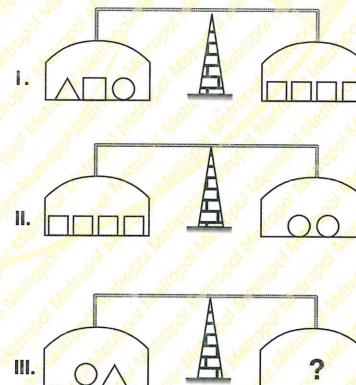
- A) B) C) D) E)

5.



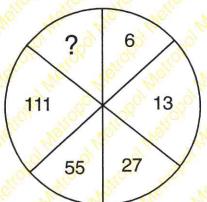
- A) 1881 B) 2840 C) 3620 D) 4840 E) 5040

6.



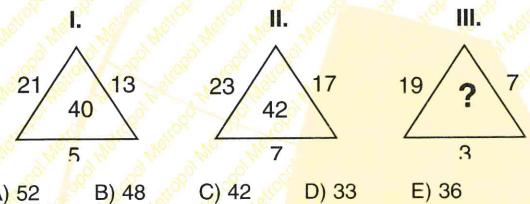
- A) \triangle B) \square C) $\circ\circ\circ$
D) $\square\square\square$ E) $\square\square\triangle\triangle$

7.



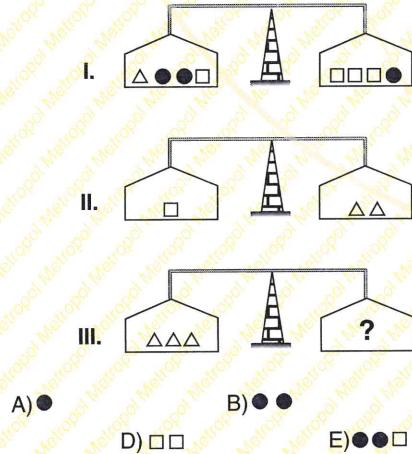
- A) 196 B) 208 C) 223 D) 228 E) 248

8.



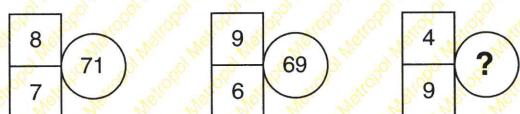
- A) 52 B) 48 C) 42 D) 33 E) 36

9.



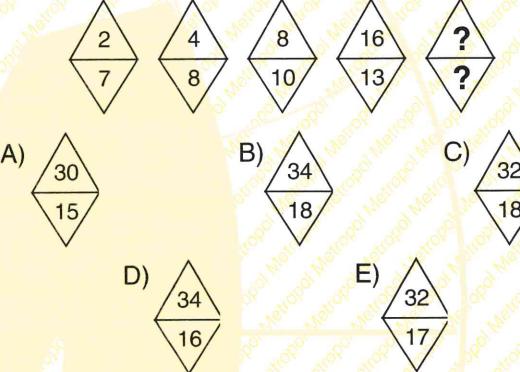
- A) ● B) ●●● C) □●● D) □□ E) ●●●□

10.



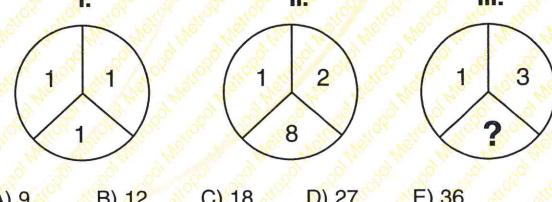
- A) 47 B) 48 C) 49 D) 50 E) 51

11.



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12.

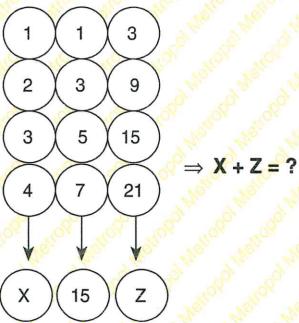


- A) 9 B) 12 C) 18 D) 27 E) 36

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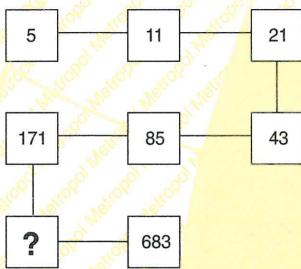
1	2	3	4	5	6	7	8	9	10	11	12
D	A	E	C	E	D	C	E	A	C	E	D

1.



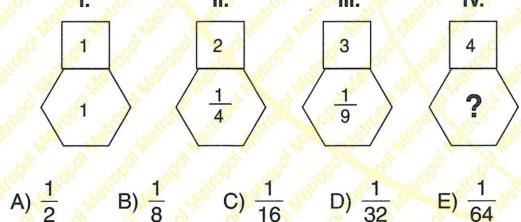
- A) 50 B) 51 C) 52 D) 53 E) 54

2.



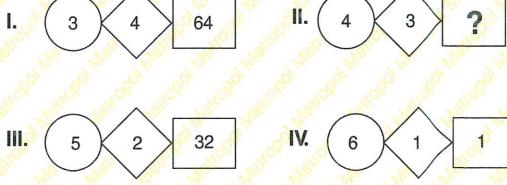
- A) 338 B) 339 C) 340 D) 341 E) 342

3.



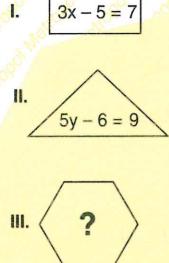
- A) $\frac{1}{2}$ B) $\frac{1}{8}$ C) $\frac{1}{16}$ D) $\frac{1}{32}$ E) $\frac{1}{64}$

4.



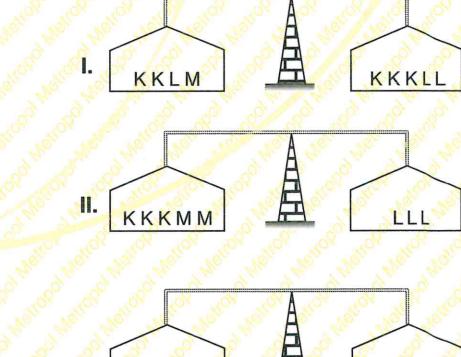
- A) 16 B) 64 C) 81 D) 128 E) 256

5.



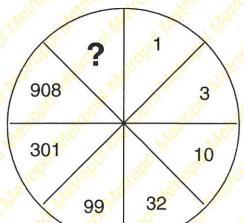
- A) $4z + 8 = 20$ B) $4z - 7 = 13$ C) $4z - 6 = 30$
D) $4z - 5 = 19$ E) $4z - 8 = 10$

6.



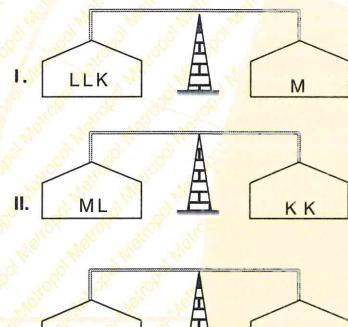
- A) L B) LL C) LLL
D) LLLL E) LLLLL

7.



- A) 2630 B) 2730 C) 3630 D) 3645 E) 3680

8.



- A) L B) LL C) LLL
D) LLLL E) LLLLL

9.

I.	<table border="1"> <tr><td>5</td><td>4</td><td>2</td></tr> <tr><td>4</td><td></td><td>1</td></tr> <tr><td>2</td><td>5</td><td>7</td></tr> </table>	5	4	2	4		1	2	5	7
5	4	2								
4		1								
2	5	7								
II.	<table border="1"> <tr><td>0</td><td>1</td><td>2</td></tr> <tr><td>2</td><td>3</td><td>2</td></tr> <tr><td>1</td><td></td><td>1</td></tr> </table>	0	1	2	2	3	2	1		1
0	1	2								
2	3	2								
1		1								
III.	<table border="1"> <tr><td>8</td><td>0</td><td>0</td></tr> <tr><td>10</td><td>?</td><td>3</td></tr> <tr><td>12</td><td></td><td>3</td></tr> </table>	8	0	0	10	?	3	12		3
8	0	0								
10	?	3								
12		3								

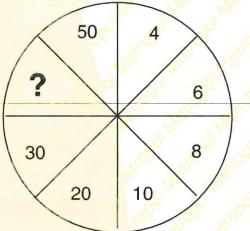
- A) 4 B) 5 C) 6 D) 7 E) 8

10.

I.	<table border="1"> <tr><td>9</td><td>4</td><td>7</td></tr> <tr><td></td><td>4</td><td></td></tr> <tr><td>6</td><td>8</td><td>2</td></tr> </table>	9	4	7		4		6	8	2
9	4	7								
	4									
6	8	2								
II.	<table border="1"> <tr><td>8</td><td>9</td><td>10</td></tr> <tr><td></td><td>12</td><td></td></tr> <tr><td>2</td><td>5</td><td>8</td></tr> </table>	8	9	10		12		2	5	8
8	9	10								
	12									
2	5	8								
III.	<table border="1"> <tr><td>7</td><td>3</td><td>6</td></tr> <tr><td>?</td><td></td><td></td></tr> <tr><td>2</td><td>3</td><td>5</td></tr> </table>	7	3	6	?			2	3	5
7	3	6								
?										
2	3	5								

- A) 5 B) 6 C) 7 D) 8 E) 9

11.



- A) 24 B) 36 C) 40 D) 48 E) 52

12.

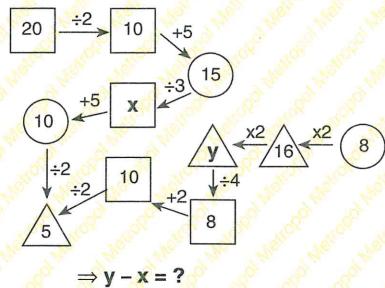
I.	<table border="1"> <tr><td>5</td></tr> <tr><td>53</td></tr> <tr><td>8</td></tr> </table>	5	53	8
5				
53				
8				
II.	<table border="1"> <tr><td>6</td></tr> <tr><td>55</td></tr> <tr><td>7</td></tr> </table>	6	55	7
6				
55				
7				
III.	<table border="1"> <tr><td>11</td></tr> <tr><td>119</td></tr> <tr><td>9</td></tr> </table>	11	119	9
11				
119				
9				
IV.	<table border="1"> <tr><td>29</td></tr> <tr><td>?</td></tr> <tr><td>10</td></tr> </table>	29	?	10
29				
?				
10				

- A) 129 B) 229 C) 290 D) 329 E) 339

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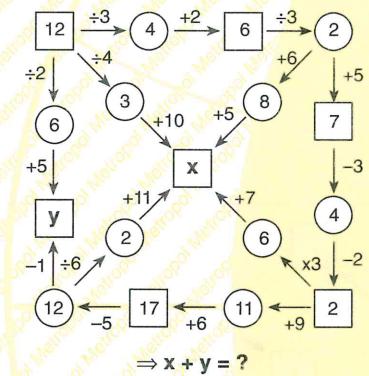
1	2	3	4	5	6	7	8	9	10	11	12
D	D	C	C	D	A	B	C	C	B	C	D

1



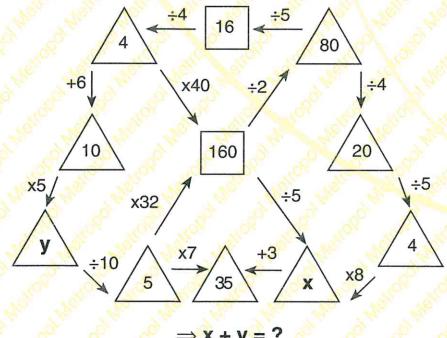
- A) 34 B) 32 C) 27 D) 16 E) 5

2



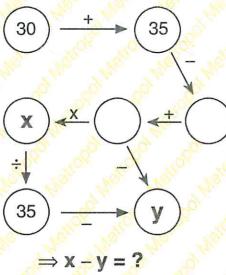
- A) 25 B) 24 C) 23 D) 22 E) 11

3



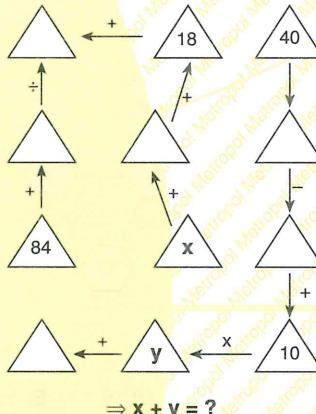
- A) 72 B) 75 C) 82 D) 90 E) 96

4.



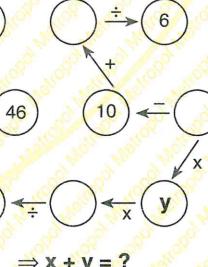
- A) 135 B) 140 C) 145 D) 150 E) 155

5.



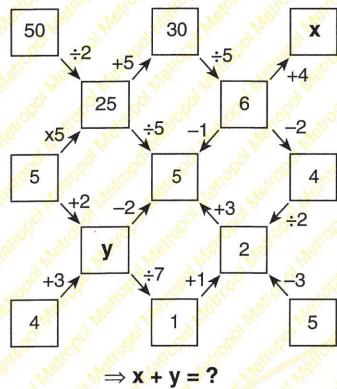
- A) 48 B) 50 C) 52 D) 54 E) 56

6.



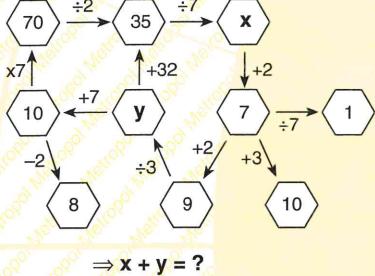
- A) 68 B) 70 C) 72 D) 74 E) 76

7.



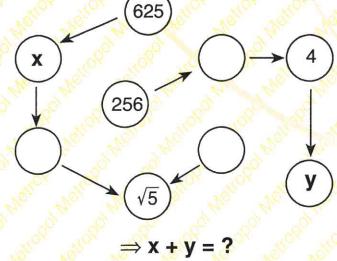
- A) 17 B) 18 C) 20 D) 21 E) 25

8.



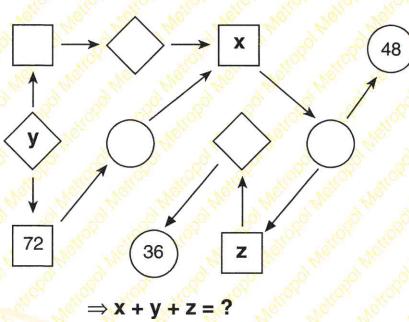
- A) 4 B) 8 C) 12 D) 15 E) 18

9.



- A) 24 B) 25 C) 26 D) 27 E) 28

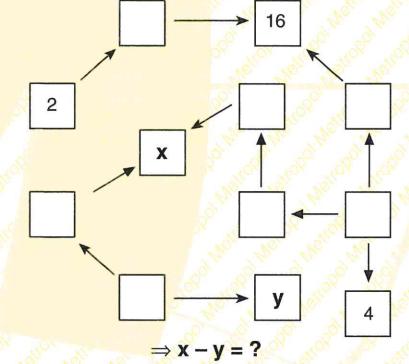
10.



- A) 180 B) 182 C) 184 D) 186 E) 188

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11.

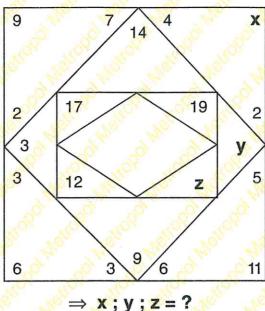


- A) 224 B) 240 C) 252 D) 254 E) 256

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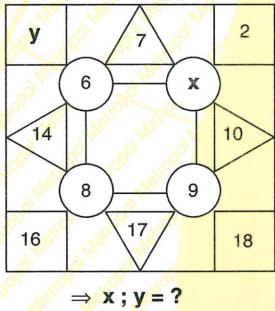
1	2	3	4	5	6	7	8	9	10	11
C	B	C	C	B	B	A	B	D	D	B

1.



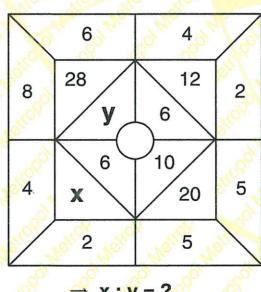
- A) 3; 2; 7 B) 6; 5; 14 C) 8; 6; 28
D) 2; 3; 28 E) 2; 3; 28

2.



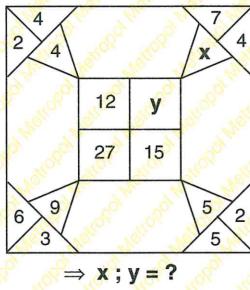
- A) 1; 12 B) 6; 12 C) 1; 6
D) 9; 3 E) 3; 9

3.



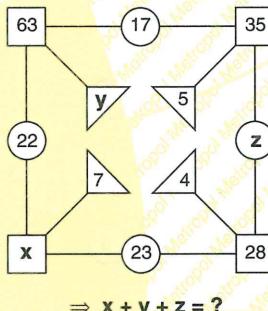
- A) 9; 12 B) 6; 12 C) 6; 14
D) 12; 14 E) 16; 26

4.



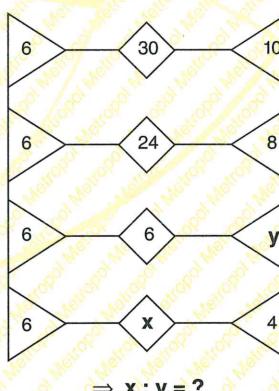
- A) 4; 28 B) 28; 3 C) 54; 17
D) 14; 42 E) 27; 42

5.



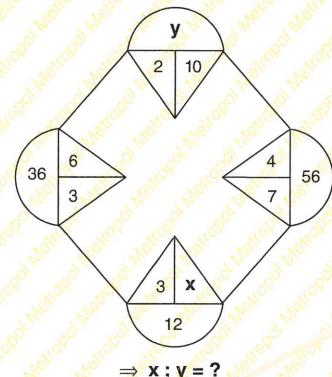
- A) 76 B) 75 C) 74 D) 73 E) 72

6.



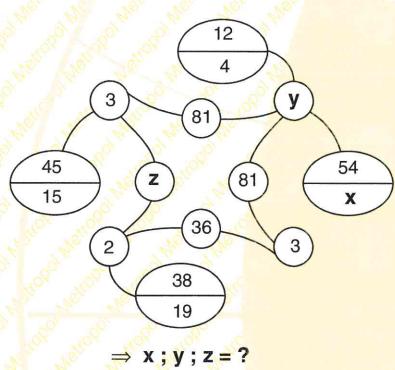
- A) 6; 8 B) 6; 12 C) 12; 2
D) 6; 10 E) 12; 8

7.



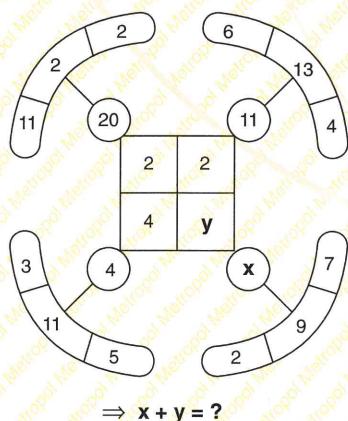
- A) 8, 8 B) 4, 10 C) 2, 20
D) 1, 2 E) 2, 40

8.



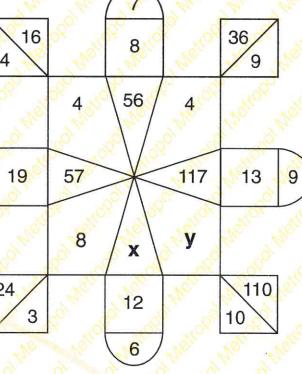
- A) 18; 36; 72 B) 33; 5; 6 C) 18; 3; 36
D) 9; 6; 18 E) 9; 27; 81

9.



- A) 4 B) 6 C) 8 D) 10 E) 12

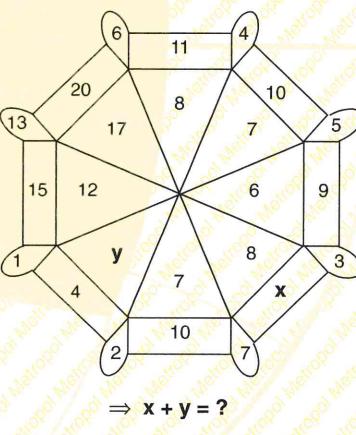
10.



- A) 80 B) 83 C) 86 D) 89 E) 92

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11.

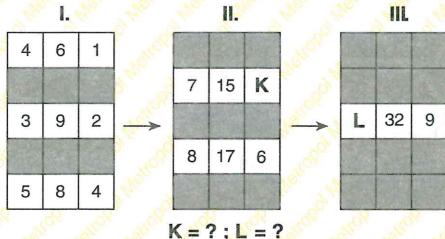


- A) 12 B) 14 C) 16 D) 18 E) 20

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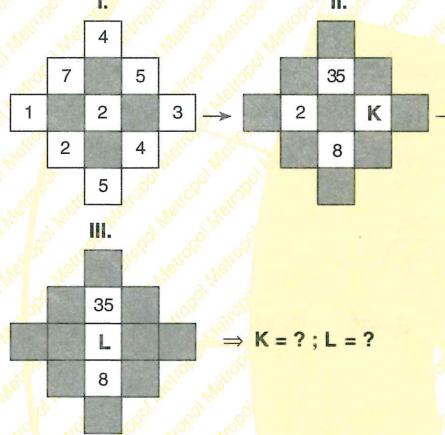
1	2	3	4	5	6	7	8	9	10	11
B	A	D	D	A	C	E	C	D	B	A

1.



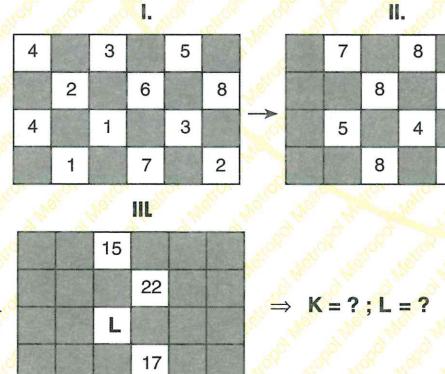
- A) 2 ; 14
B) 3 ; 14
C) 3 ; 15
D) 4 ; 15
E) 4 ; 16

2.



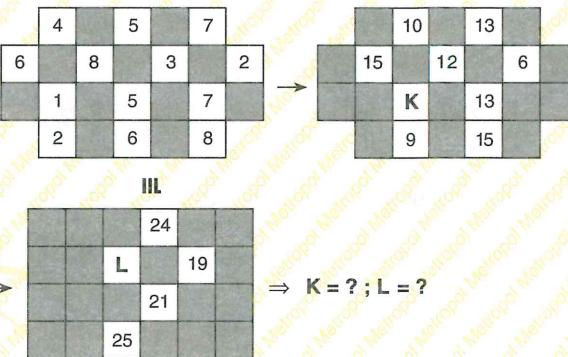
- A) 4 ; 8
B) 5 ; 8
C) 5 ; 12
D) 6 ; 12
E) 6 ; 14

3.



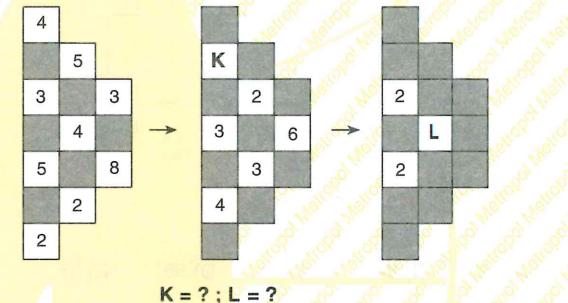
- A) 8 ; 9
B) 8 ; 10
C) 9 ; 9
D) 9 ; 10
E) 10 ; 9

4.



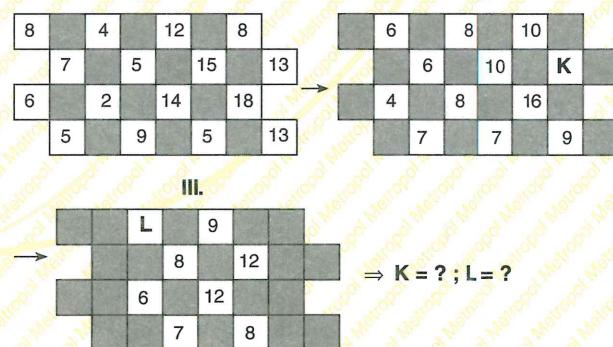
- A) 7 ; 27
B) 7 ; 28
C) 8 ; 26
D) 8 ; 27
E) 9 ; 28

5.



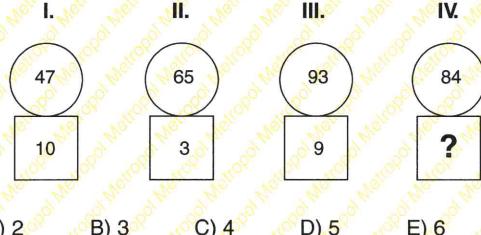
- A) 2 ; 1
B) 1 ; 2
C) 1 ; 1
D) 2 ; 2
E) 0 ; 2

6.



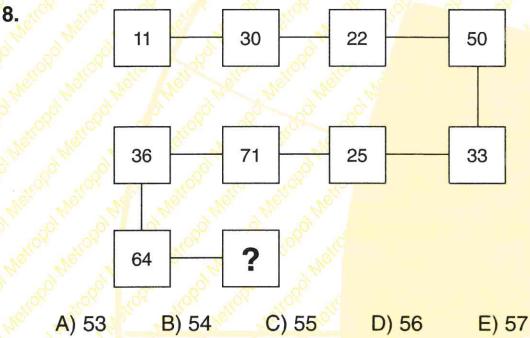
- A) 12 ; 7
B) 14 ; 7
C) 14 ; 8
D) 16 ; 6
E) 16 ; 7

7.



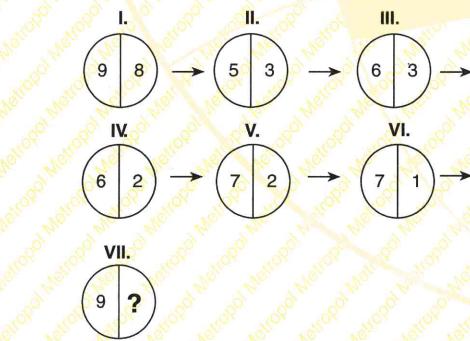
- A) 2 B) 3 C) 4 D) 5 E) 6

8.



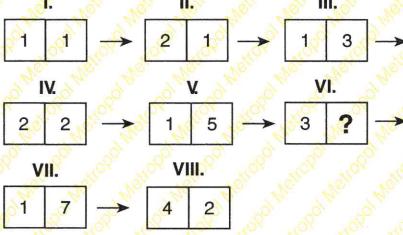
- A) 53 B) 54 C) 55 D) 56 E) 57

9.



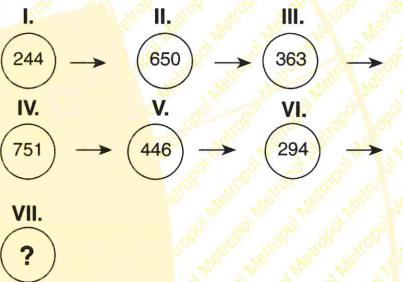
- A) 1 B) 2 C) 3 D) 4 E) 5

10.



- A) 1 B) 2 C) 3 D) 4 E) 5

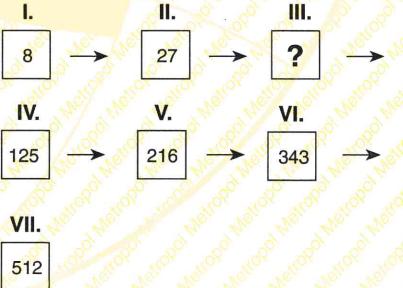
11.



- A) 444 B) 445 C) 446 D) 447 E) 448

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12.

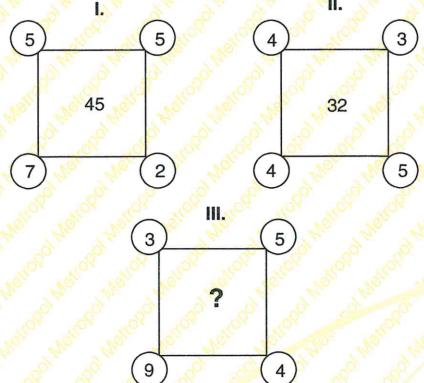


- A) 62 B) 64 C) 66 D) 70 E) 72

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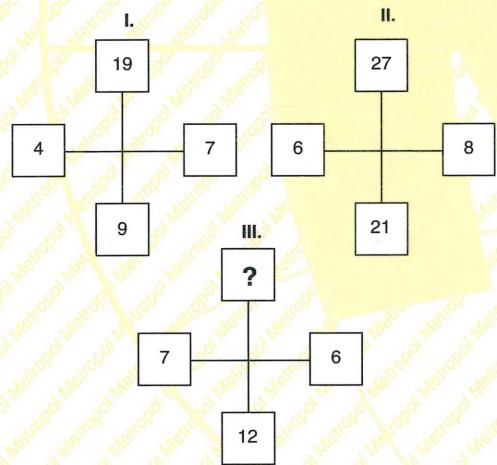
1	2	3	4	5	6	7	8	9	10	11	12
C	D	C	B	D	B	D	D	B	B	E	B

1.



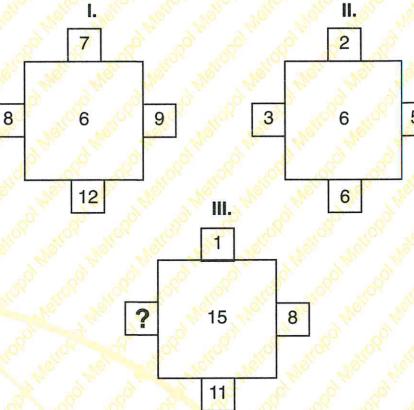
- A) 57 B) 64 C) 72 D) 86 E) 98

2.



- A) 24 B) 30 C) 34 D) 44 E) 49

3.



- A) 3 B) 5 C) 9 D) 12 E) 14

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4.

$$\begin{array}{l} \text{I. } \triangle(6) + \square(2) + \diamond(4) = 42 \\ \text{II. } \hexagon(4) - \triangle(3) + \square(2) = 23 \\ \text{III. } \text{pentagon}(6) + \triangle(1) - \square(5) = ? \end{array}$$

- A) 4 B) 8 C) 13 D) 19 E) 21

5.

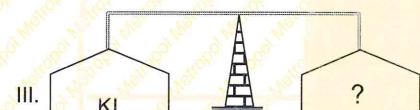
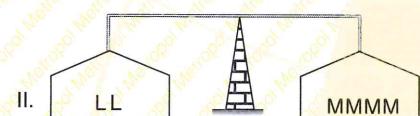
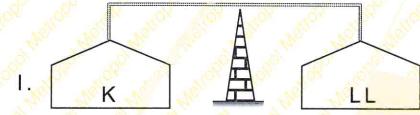
I. + + = $(a + 4) + (b - 3) + (c \cdot 5)$

II. + - = 7

III. + - = ?

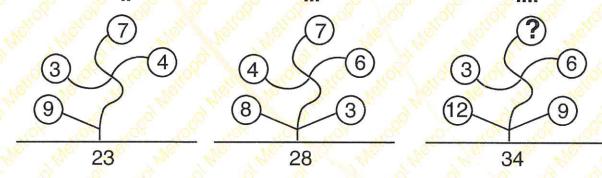
- A) 3 B) 7 C) 9 D) 12 E) 14

6.



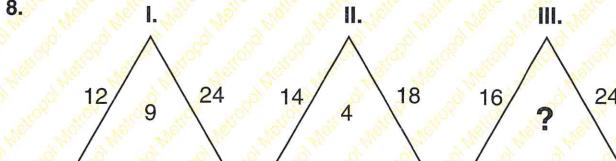
- A) MM B) MMM C) MMMMM
D) MMMMM E) MMMMMMM

7.



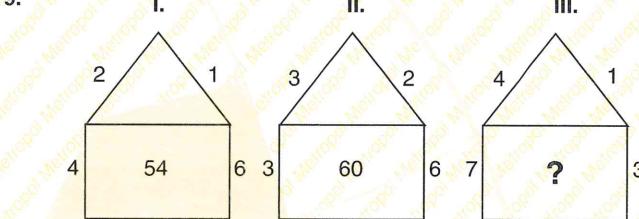
- A) 4 B) 5 C) 6 D) 7 E) 8

8.



- A) 2 B) 4 C) 8 D) 12 E) 16

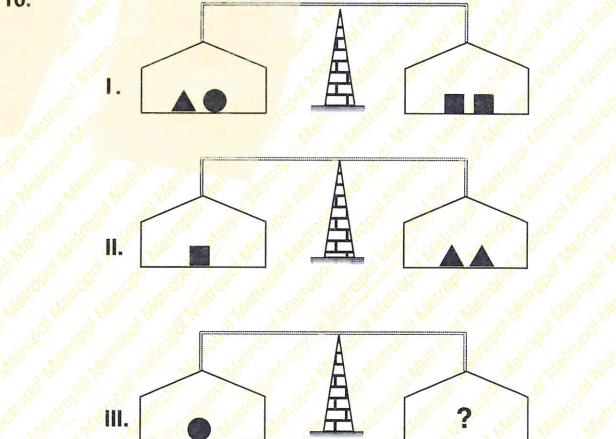
9.



- A) 24 B) 42 C) 75 D) 84 E) 96

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10.

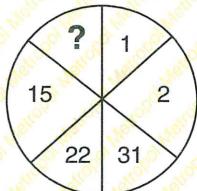


- A) ▲ B) ▲▲▲ C) ■■▲
D) ▲■▲ E) ■■■▲

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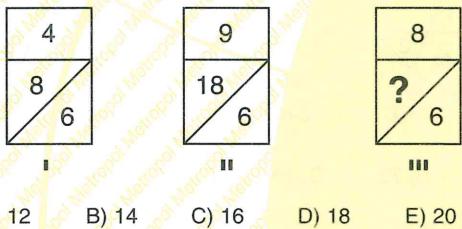
1	2	3	4	5	6	7	8	9	10
A	B	A	C	C	E	A	B	C	B

1.



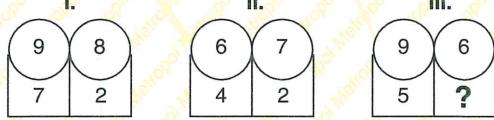
- A) 39 B) 43 C) 54 D) 56 E) 61

2.



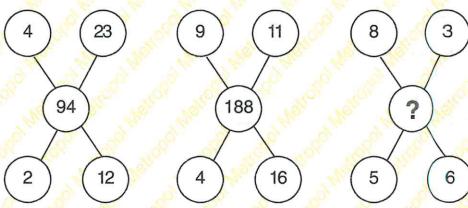
- A) 12 B) 14 C) 16 D) 18 E) 20

3.



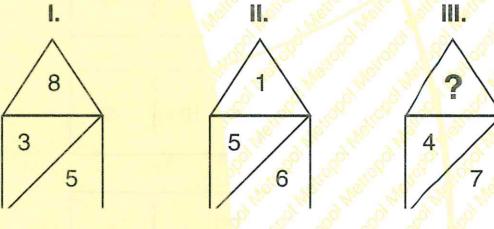
- A) 3 B) 4 C) 5 D) 6 E) 7

4.



- A) 61 B) 62 C) 63 D) 64 E) 65

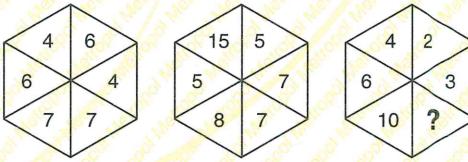
5.



- A) 8 B) 27 C) 30 D) 31 E) 38

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6.



- A) 2 B) 6 C) 7 D) 9 E) 11

7.

I.	II.	III.

8.

I. 

II. 

III. 

A) 2 B) 4 C) 7 D) 11 E) 14

- The diagram shows two separate trees, labeled I and II.

Tree I: A root node at the bottom splits into two branches. The left branch leads to a node labeled 4, which then splits into two more nodes labeled 3 and 4. The right branch from the root leads to a node labeled 2, which then splits into two nodes labeled 1 and 4. Finally, the node labeled 1 splits into two nodes labeled 2 and 9.

Tree II: A root node at the bottom splits into two branches. The left branch leads to a node labeled 4, which then splits into two nodes labeled 3 and 2. The right branch leads to a node labeled 6, which then splits into two nodes labeled 36 and 1. The node labeled 1 splits into two nodes labeled 4 and 3. The node labeled 3 splits into two nodes labeled 4 and 3. The node labeled 4 splits into two nodes labeled 4 and 1.

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10.

House	Window 1	Window 2	Window 3	Total
I	6	5	12	23
II	9	7	15	31
III	5	12	21	38

- I.**

II.

III.

12.

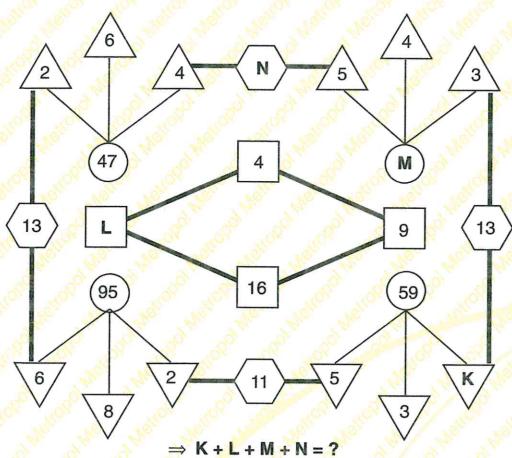
	I.	II.	III.
8	26	7	13
16		4	?
16		16	28



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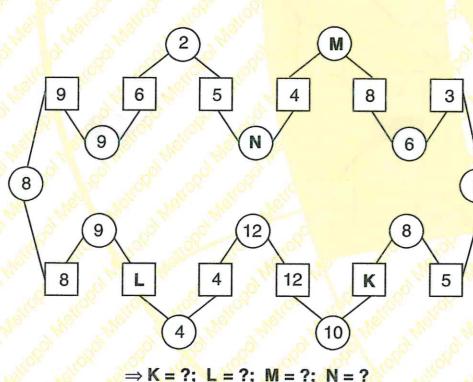
1	2	3	4	5	6	7	8	9	10	11	12
E	C	B	C	B	A	B	B	A	C	E	E

1.



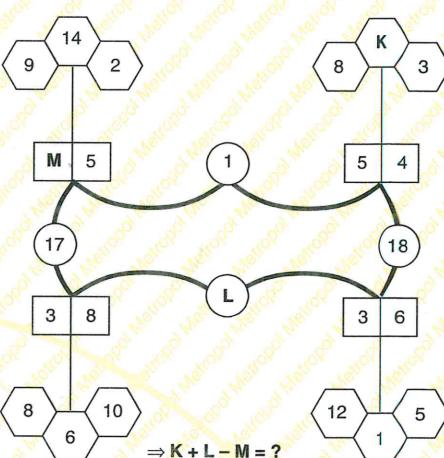
- A) 108 B) 109 C) 110 D) 111 E) 112

2.



K	L	M	N
A) 7	9	3	2
B) 7	8	2	3
C) 6	8	3	3
D) 6	10	3	4
E) 5	9	4	2

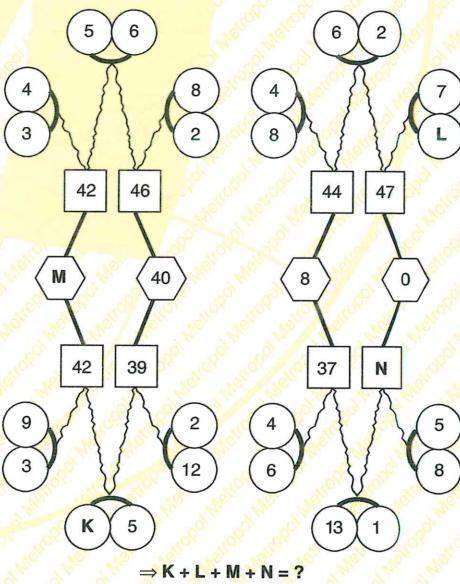
3.



- A) 4 B) 5 C) 6 D) 7 E) 8

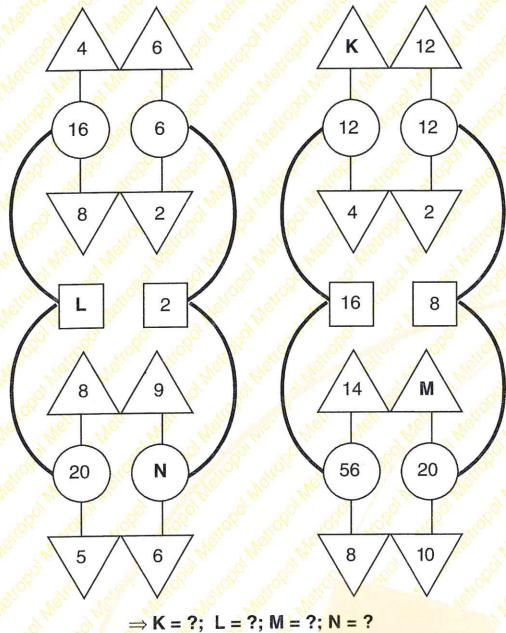
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4.



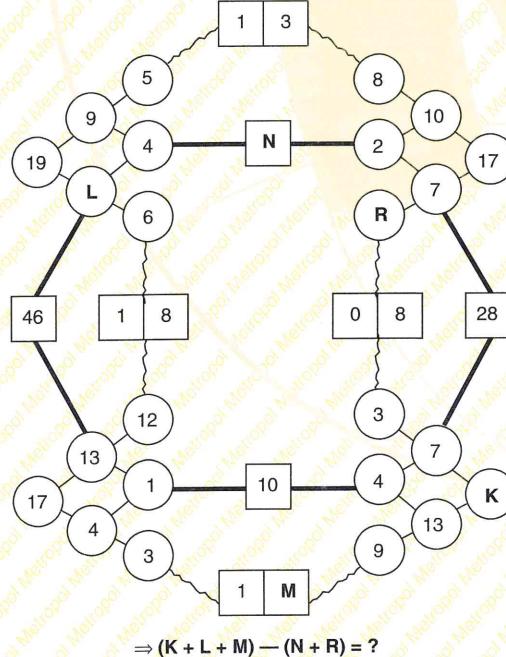
- A) 92 B) 93 C) 94 D) 95 E) 96

5.

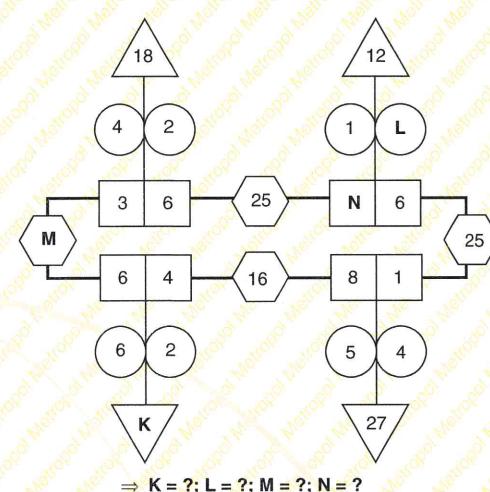


K	L	M	N
A) 10	4	6	27
B) 8	8	4	21
C) 8	6	2	21
D) 6	6	2	18
E) 6	4	4	27

6.

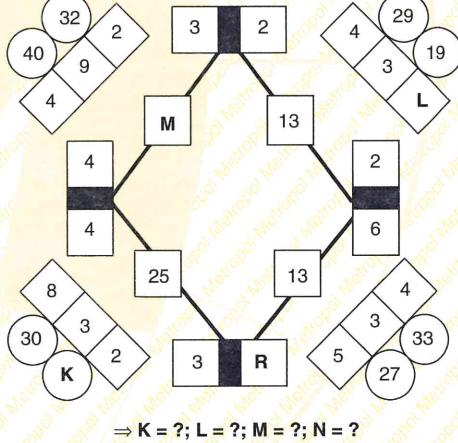


7.



K	L	M	N
A) 24	6	9	2
B) 28	3	12	2
C) 28	6	12	3
D) 24	3	9	1
E) 32	9	15	3

8.

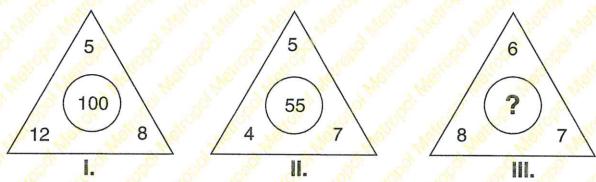


K	L	M	N
A) 17	5	18	8
B) 16	5	18	7
C) 16	3	17	7
D) 17	3	19	6
E) 18	4	19	8

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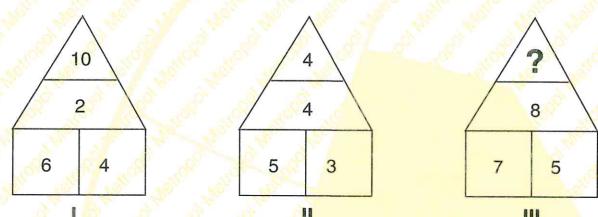
1	2	3	4	5	6	7	8
B	A	C	B	E	D	D	E

1.



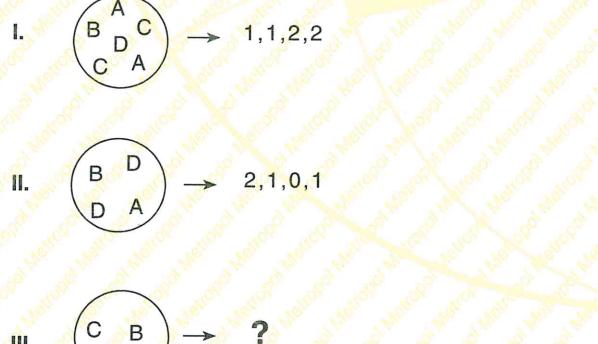
- A) 70 B) 80 C) 90 D) 100 E) 140

2.



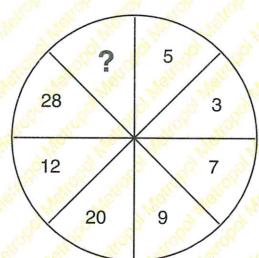
- A) 3 B) 4 C) 5 D) 6 E) 7

3.



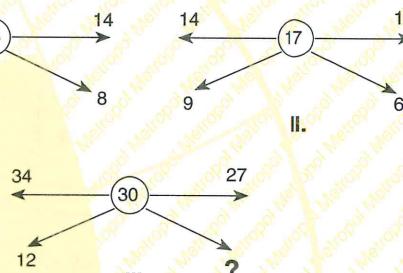
- A) 1, 2, 2, 2 B) 1, 1, 1, 2 C) 0, 0, 1, 1
D) 1, 1, 1, 0 E) 1, 1, 2, 1

4.



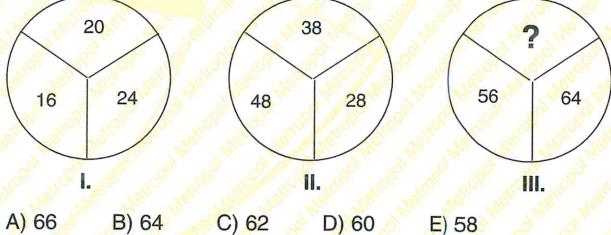
- A) 18 B) 24 C) 32 D) 36 E) 48

5.



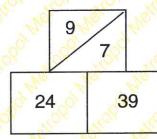
- A) 17 B) 18 C) 19 D) 20 E) 21

6.



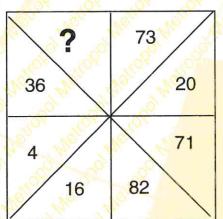
- A) 66 B) 64 C) 62 D) 60 E) 58

7.



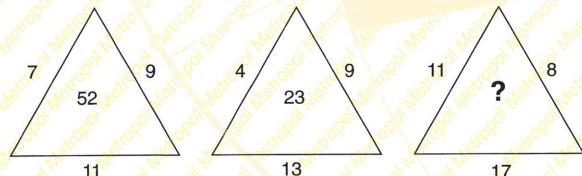
- A) 15 B) 16 C) 17 D) 18 E) 19

8.



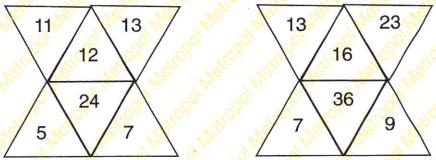
- A) 16 B) 25 C) 36 D) 49 E) 64

9.



- A) 36 B) 44 C) 51 D) 64 E) 71

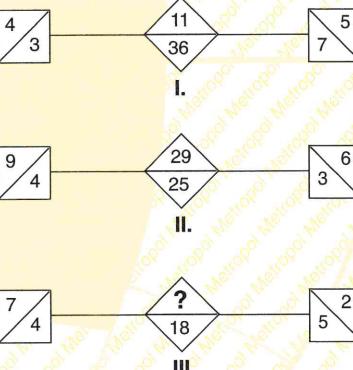
10.



- A) 15 B) 16 C) 17 D) 19 E) 21

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11.



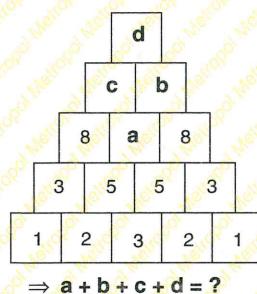
- A) 19 B) 20 C) 21 D) 22 E) 23



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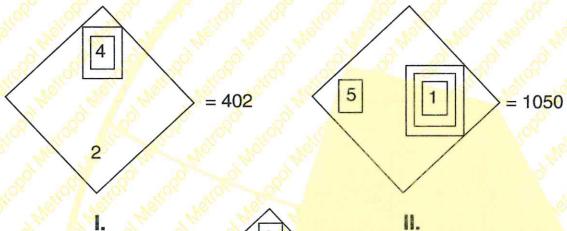
1	2	3	4	5	6	7	8	9	10	11
C	A	D	D	C	D	C	C	E	D	B

1.



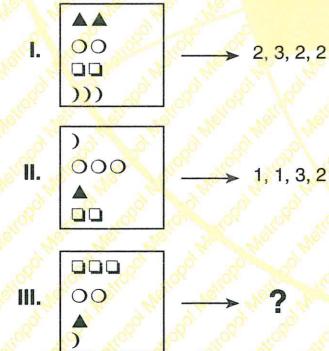
- A) 36 B) 54 C) 60 D) 72 E) 82

2.



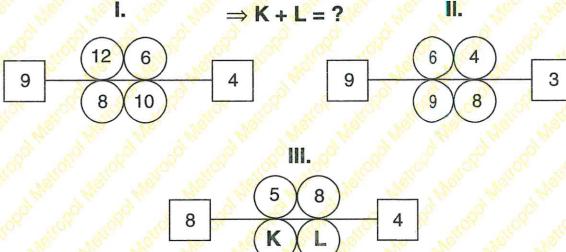
- A) 6850 B) 6635 C) 6480 D) 6354 E) 6246

3.



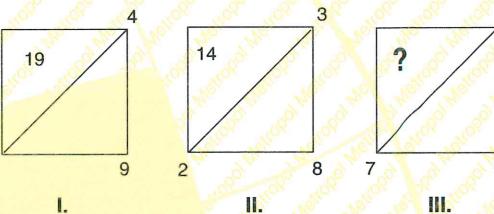
- A) 1, 1, 2, 3
B) 1, 2, 3, 1
C) 1, 3, 2, 1
D) 2, 1, 3, 2
E) 1, 2, 1, 3

4.



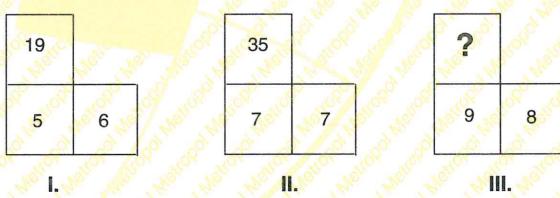
- A) 17 B) 18 C) 19 D) 20 E) 21

5.

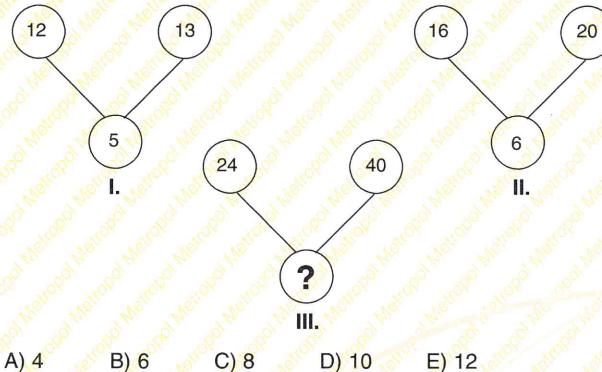


- A) 23 B) 32 C) 40 D) 41 E) 44

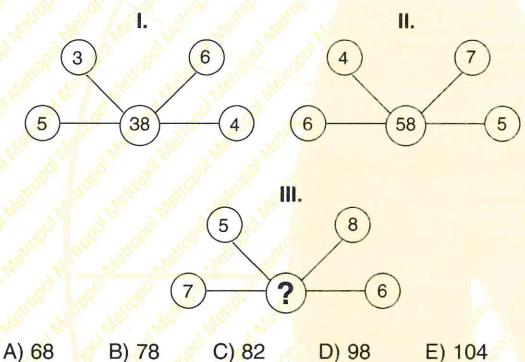
6.



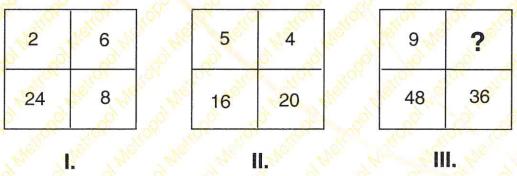
- A) 55 B) 54 C) 53 D) 52 E) 51

7.

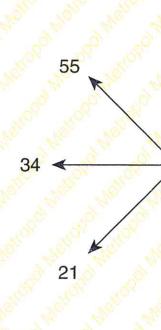
- A) 4 B) 6 C) 8 D) 10 E) 12

8.

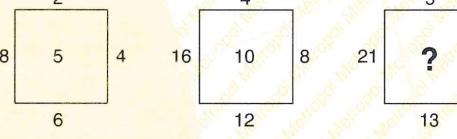
- A) 68 B) 78 C) 82 D) 98 E) 104

9.

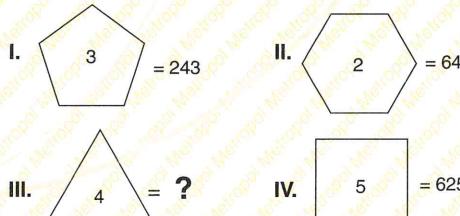
- A) 12 B) 24 C) 48 D) 56 E) 64

10.

- A) 46 B) 47 C) 60 D) 69 E) 89

11.

- A) 11 B) 12 C) 15 D) 18 E) 21

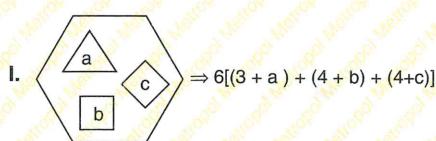
12.

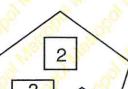
- A) 16 B) 36 C) 64 D) 92 E) 108

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1	2	3	4	5	6	7	8	9	10	11	12
E	C	A	C	A	A	C	C	A	E	B	C

1.

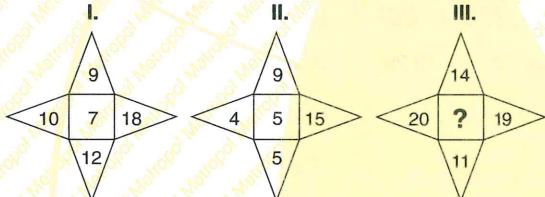


II.  $\Rightarrow 5[(4+2)+(4+3)+(5+4)]=110$



- A) 24 B) 48 C) 72 D) 98 E) 108

2.



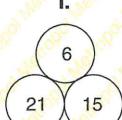
- A) 6 B) 8 C) 11 D) 12 E) 14

3.

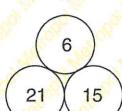


- A) $\frac{3}{8}$ B) $\frac{5}{8}$ C) $\frac{15}{8}$ D) 1 E) 8

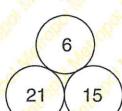
4.



- A) 54 B) 55 C) 56 D) 57 E) 58

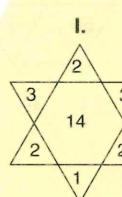


- A) 54 B) 55 C) 56 D) 57 E) 58



- A) 54 B) 55 C) 56 D) 57 E) 58

5.



- A) 8 B) 11 C) 15 D) 21 E) 24



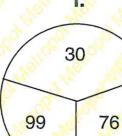
- A) 8 B) 11 C) 15 D) 21 E) 24



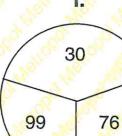
- A) 8 B) 11 C) 15 D) 21 E) 24

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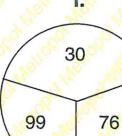
6.



- A) 25 B) 32 C) 37 D) 46 E) 54

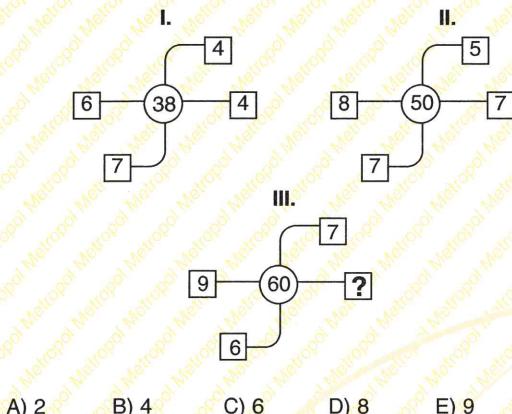


- A) 25 B) 32 C) 37 D) 46 E) 54

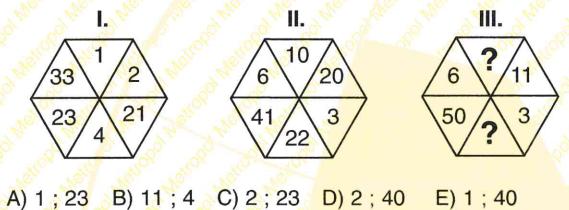


- A) 25 B) 32 C) 37 D) 46 E) 54

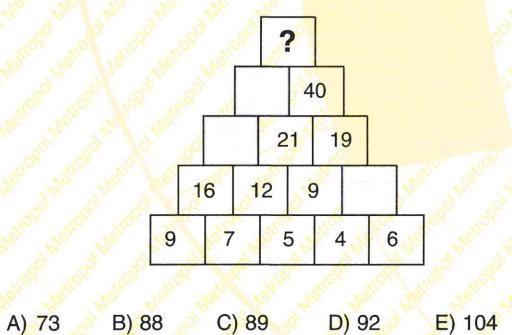
7.



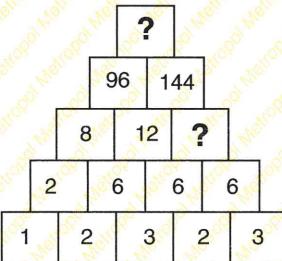
8.



9.

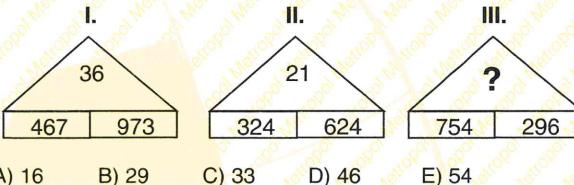


10.



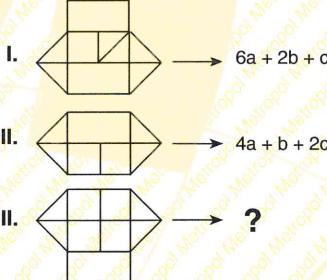
- A) 36,240 B) 36,196 C) 18,216
D) 12,228 E) 12,240

11.



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12.

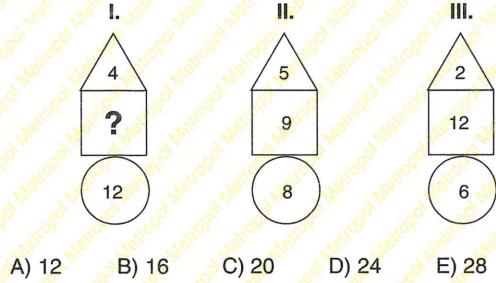


- A) $4a + b + c$
B) $4a + 2b + 3c$
C) $4a + 2b + c$
D) $4a + b + 2c$
E) $4a + b + 4c$

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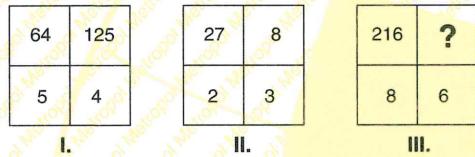
1	2	3	4	5	6	7	8	9	10	11	12
E	E	C	D	D	A	E	E	C	E	C	E

1.



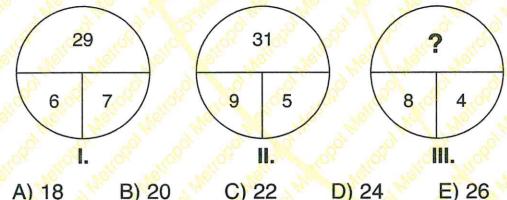
- A) 12 B) 16 C) 20 D) 24 E) 28

2.



- A) 428 B) 456 C) 512 D) 572 E) 743

3.



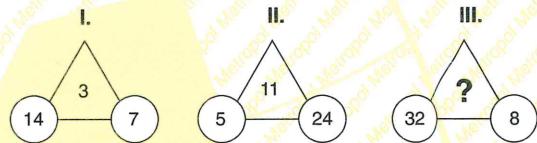
- A) 18 B) 20 C) 22 D) 24 E) 26

4.

1	4	9	16	25	36	?
7	8	10	13	17	22	?

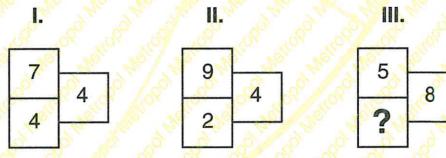
- A) 48 B) 49 C) 48 D) 49 E) 49

5.



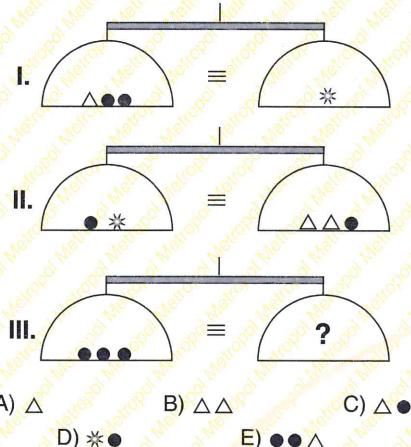
- A) 3 B) 4 C) 5 D) 6 E) 7

6.

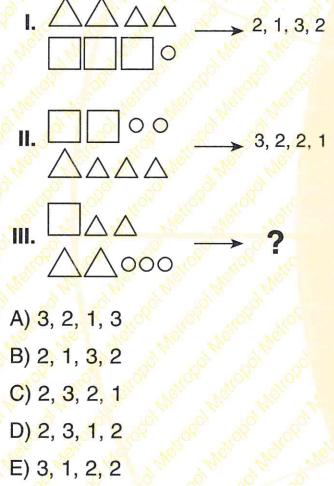


- A) 1 B) 2 C) 3 D) 4 E) 5

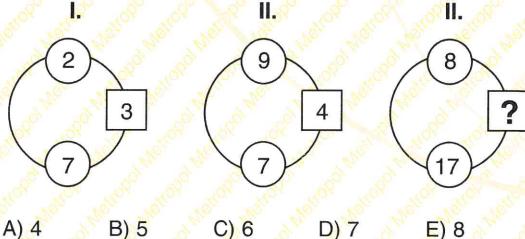
7.



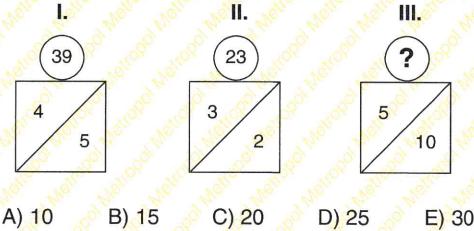
8.



9.

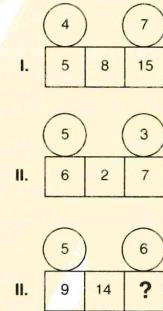


10.

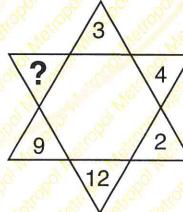


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1.

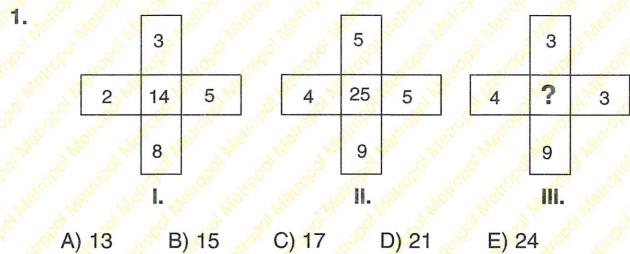


12.



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1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	D	B	B	C	D	B	D	B	C



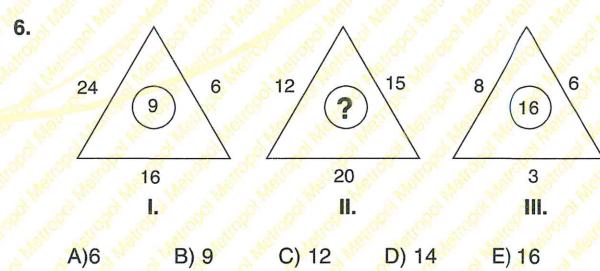
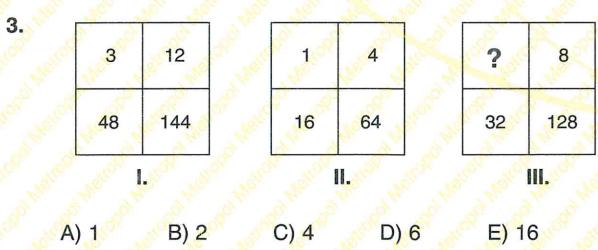
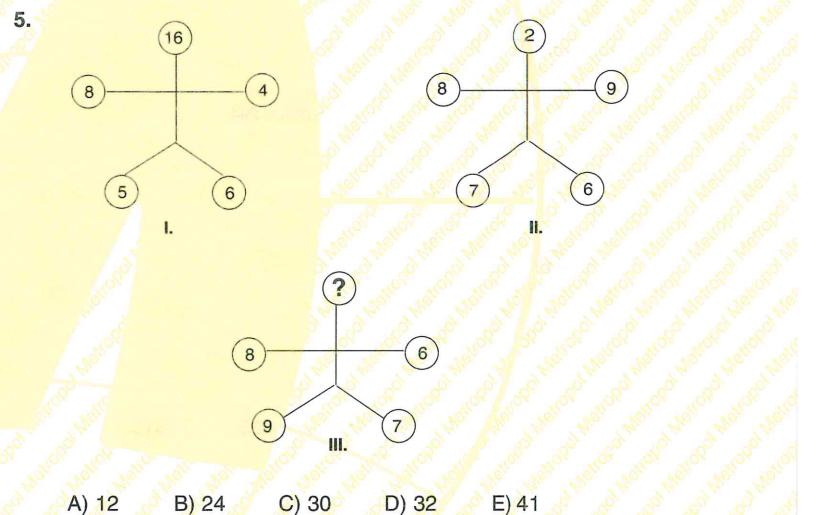
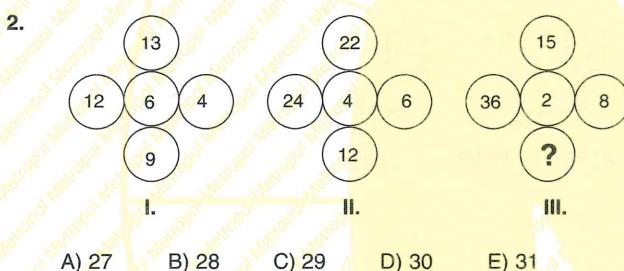
4. I. $\equiv 2a + 4b + 2c$

II. $\equiv 2a + 8b + c$

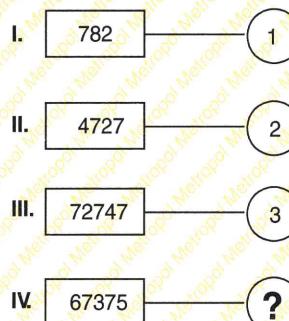
III. $\equiv 2a + 6b + 2d$

IV. $\equiv ?$

- A) $4 \cdot a + c + b + 2 \cdot d$
 B) $a + 2 \cdot b + 4 \cdot c + d$
 C) $a + 4 \cdot b + c + d$
 D) $4 \cdot a + b + c + d$
 E) $a + b + c + 4d$

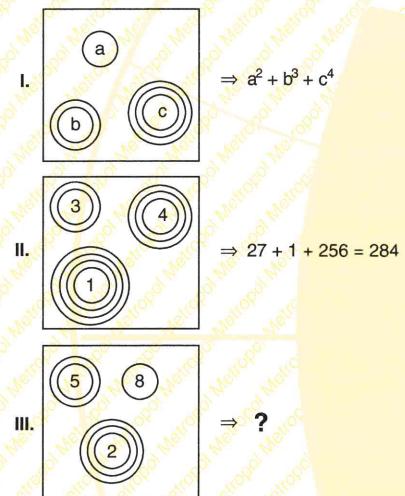


7.



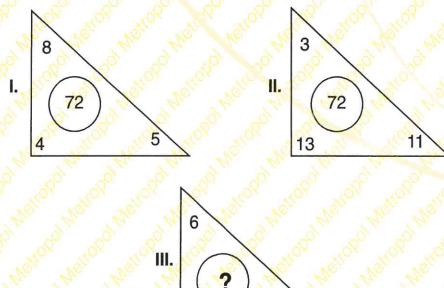
- A) 2 B) 3 C) 4 D) 5 E) 6

8.



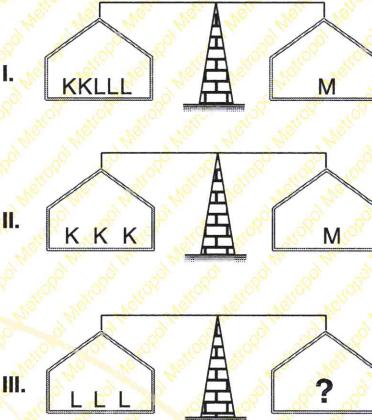
- A) 41 B) 138 C) 205 D) 235 E) 315

9.



- A) 63 B) 69 C) 78 D) 82 E) 94

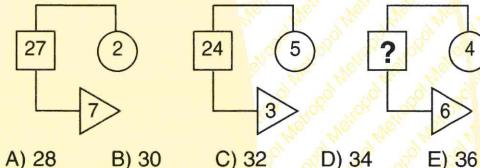
10.



- A) K B) KK C) KKK
D) KKKK E) KKKKK

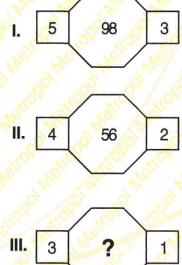
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11.



- A) 28 B) 30 C) 32 D) 34 E) 36

12.

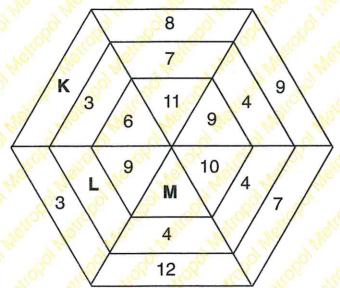


- A) 24 B) 25 C) 26 D) 27 E) 28

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	E	B	D	C	B	A	C	C	A	B	C

1.



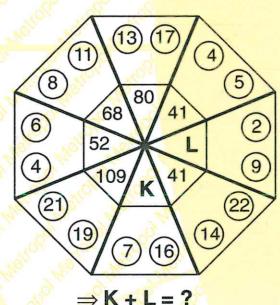
$\Rightarrow K = ?$

$\Rightarrow L = ?$

$\Rightarrow M = ?$

- | K | L | M |
|------|---|----|
| A) 4 | 5 | 12 |
| B) 4 | 5 | 11 |
| C) 5 | 6 | 12 |
| D) 3 | 4 | 11 |
| E) 5 | 4 | 10 |

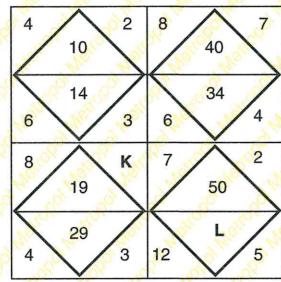
2.



$\Rightarrow K + L = ?$

- A) 180 B) 181 C) 182 D) 183 E) 184

3.



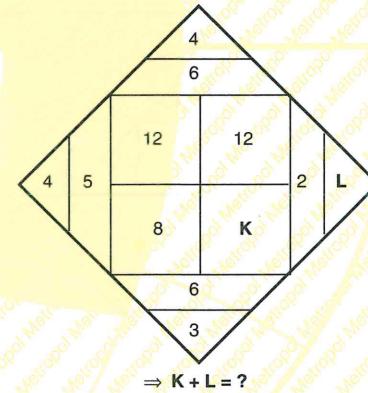
$\Rightarrow K = ?$

$\Rightarrow L = ?$

- | K | L |
|------|----|
| A) 6 | 10 |
| B) 8 | 10 |
| C) 7 | 9 |
| D) 6 | 9 |
| E) 8 | 8 |

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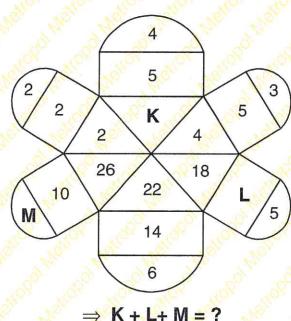
4.



$\Rightarrow K + L = ?$

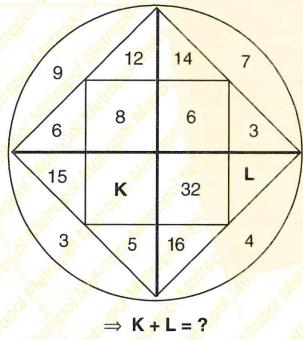
- A) 20 B) 21 C) 22 D) 23 E) 24

5.



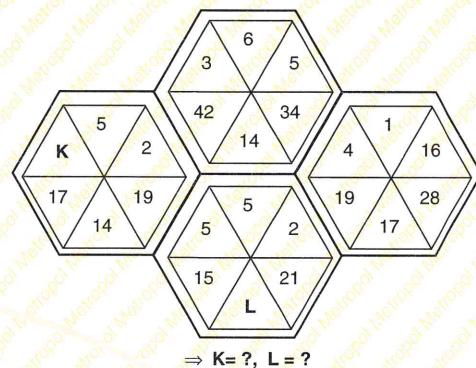
- A) 22 B) 23 C) 24 D) 25 E) 26

6.



- A) 30 B) 31 C) 32 D) 33 E) 34

7.

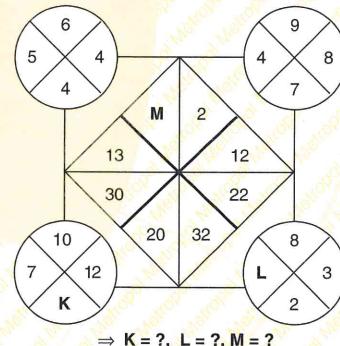


$$\Rightarrow K = ?, L = ?$$

K	L
A) 5	13
B) 6	12
C) 7	13
D) 6	14
E) 5	14

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8.



$$\Rightarrow K = ?, L = ?, M = ?$$

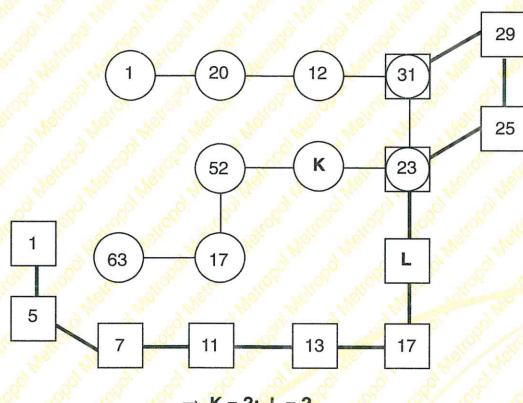
K	L	M
A) 4	20	33
B) 4	20	41
C) 3	21	33
D) 3	21	23
E) 5	22	41



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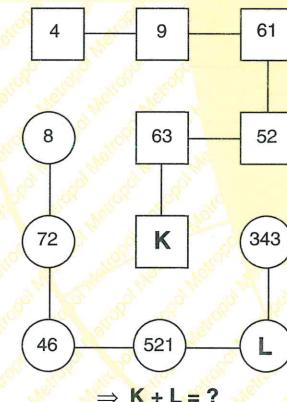
1	2	3	4	5	6	7	8
C	D	D	B	B	D	E	B

1.



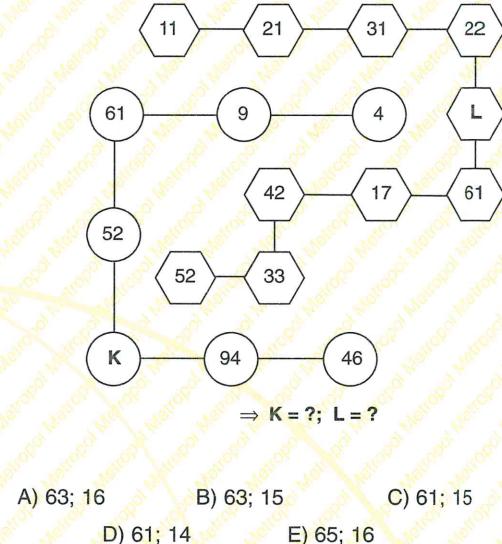
- A) 33; 21 B) 34; 19 C) 34; 21
D) 33; 19 E) 32; 20

2.



- A) 706 B) 705 C) 704 D) 703 E) 702

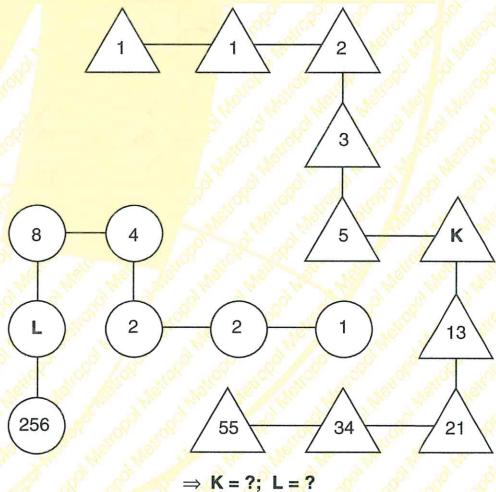
3.



- A) 63; 16 B) 63; 15 C) 61; 15
D) 61; 14 E) 65; 16

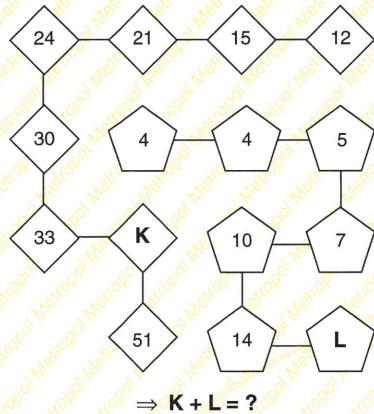
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4.



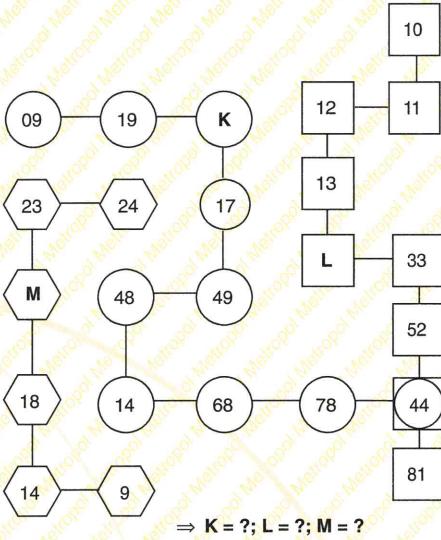
- A) 4; 16 B) 4; 32 C) 8; 32
D) 8; 64 E) 12; 64

5.



- A) 57 B) 58 C) 59 D) 60 E) 61

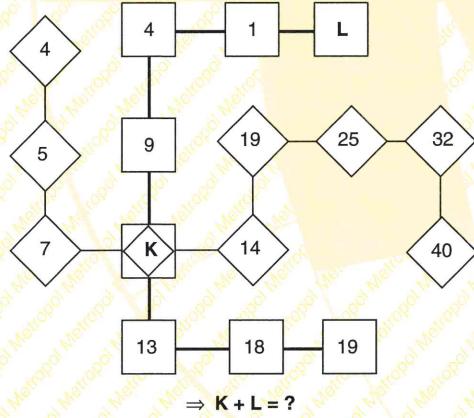
7.



K L M

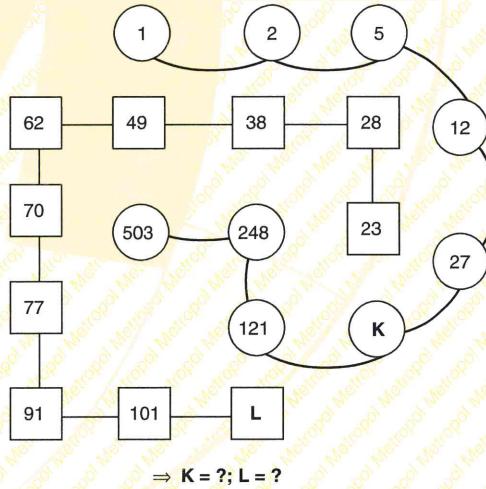
- | | | |
|-------|----|----|
| A) 18 | 32 | 21 |
| B) 18 | 31 | 23 |
| C) 17 | 31 | 22 |
| D) 17 | 30 | 21 |
| E) 19 | 32 | 23 |

6.



- A) 9 B) 10 C) 11 D) 12 E) 13

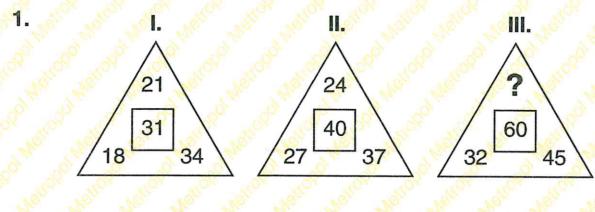
8.



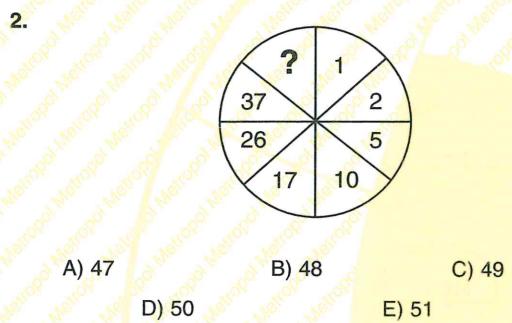
- A) 56; 101 B) 57; 102 C) 58; 102
D) 58; 103 E) 59; 103

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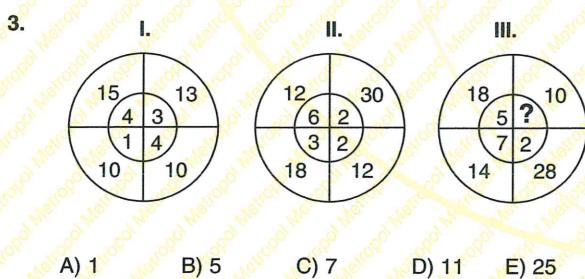
1	2	3	4	5	6	7	8
D	A	B	C	B	B	A	D



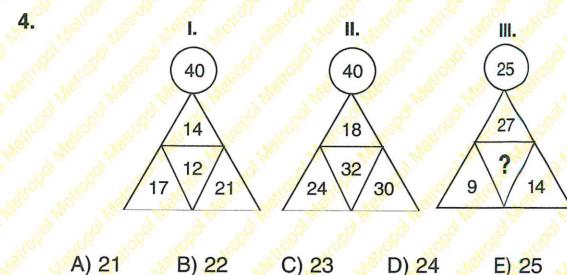
- A) 14 B) 15 C) 16 D) 17 E) 18



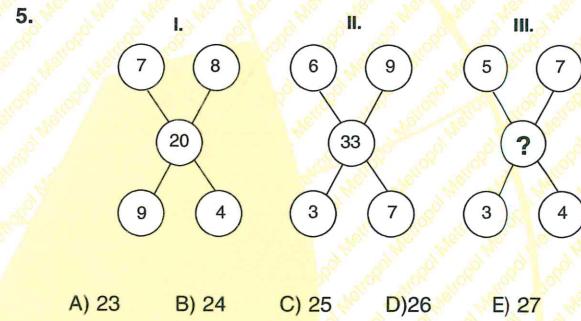
- A) 47 B) 48 C) 49 D) 50 E) 51



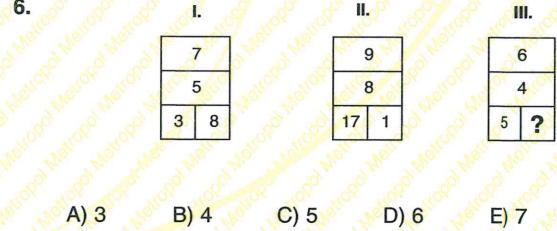
- A) 1 B) 5 C) 7 D) 11 E) 25



- A) 21 B) 22 C) 23 D) 24 E) 25

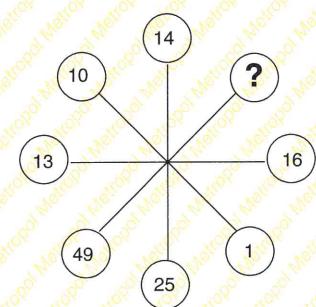


- A) 23 B) 24 C) 25 D) 26 E) 27



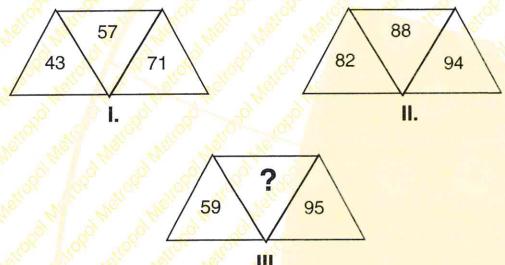
- A) 3 B) 4 C) 5 D) 6 E) 7

7.



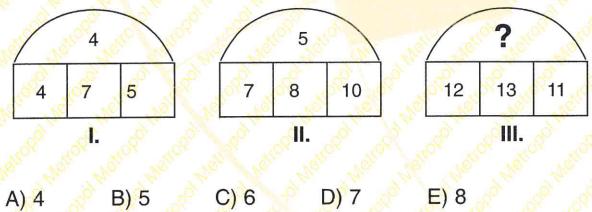
- A) 18 B) 14 C) 15 D) 26 E) 25

8.



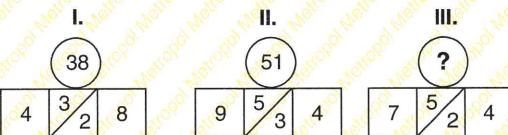
- A) 77 B) 78 C) 79 D) 80 E) 81

9.



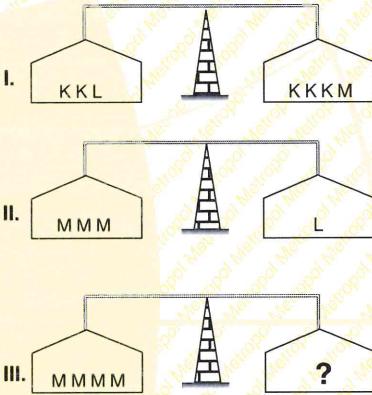
- A) 4 B) 5 C) 6 D) 7 E) 8

10.



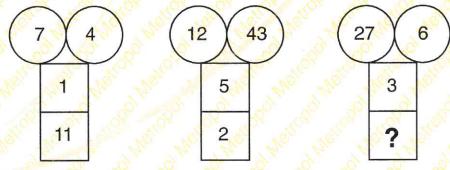
- A) 36 B) 37 C) 38 D) 39 E) 40

11.



- A) K B) KK C) KKK
D) KKKK E) KKKKK

12.

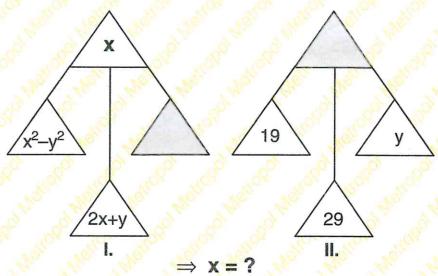


- A) 5 B) 7 C) 9 D) 11 E) 13

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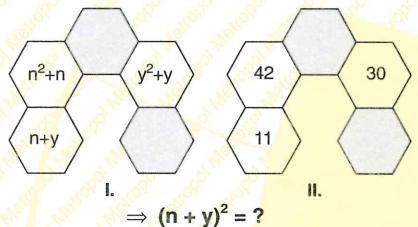
1	2	3	4	5	6	7	8	9	10	11	12
D	D	A	E	A	B	E	A	C	C	B	A

1.



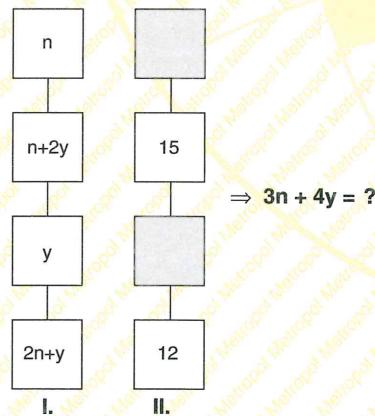
- A) 5 B) 6 C) 8 D) 10 E) 12

2.



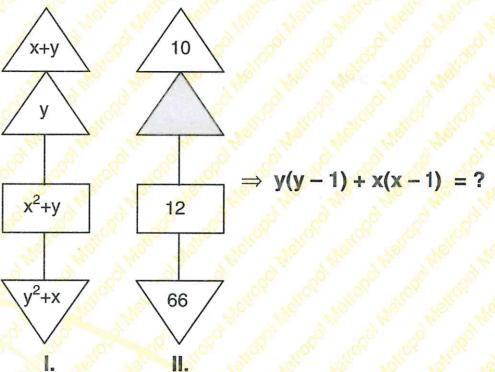
- A) 121 B) 100 C) 81 D) 64 E) 36

3.



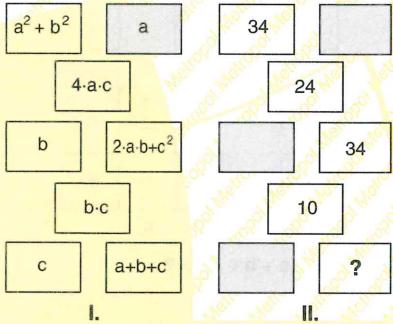
- A) 18 B) 27 C) 25 D) 33 E) 36

4.



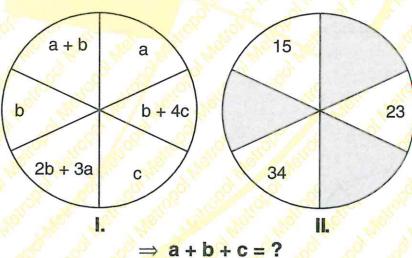
- A) 12 B) 24 C) 34 D) 48 E) 58

5.



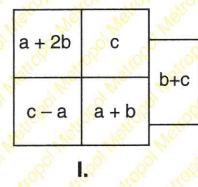
- A) 6 B) 8 C) 10 D) 18 E) 36

6.



- A) 11 B) 15 C) 18 D) 24 E) 30

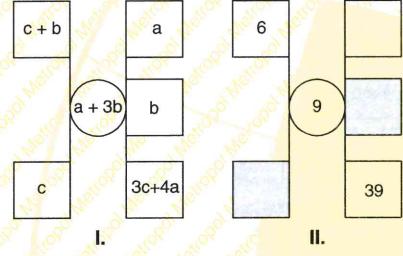
7.



$$\Rightarrow b = ?$$

- A) 3 B) 7 C) 10 D) 12 E) 15

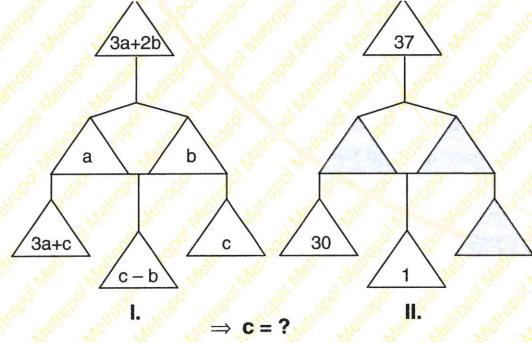
8.



$$\Rightarrow (a + b + c)^2 = ?$$

- A) 36 B) 49 C) 64 D) 121 E) 144

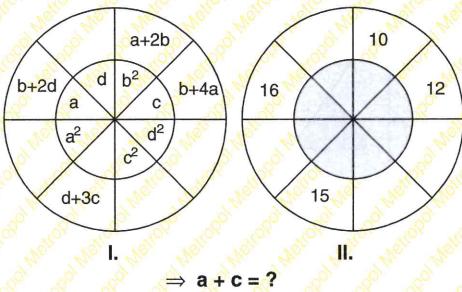
9.



$$\Rightarrow c = ?$$

- A) 3 B) 7 C) 9 D) 12 E) 15

10.

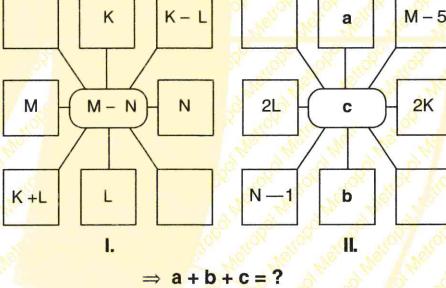


$$\Rightarrow a + c = ?$$

- A) 1 B) 3 C) 4 D) 5 E) 8

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11.



$$\Rightarrow a + b + c = ?$$

- A) 5 B) 6 C) 7 D) 8 E) 9

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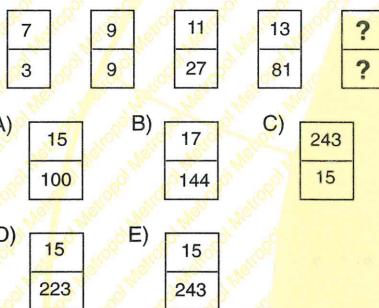
1	2	3	4	5	6	7	8	9	10	11
D	A	D	E	C	C	C	E	C	D	A

1.



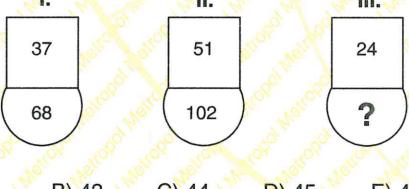
- A) 17 B) 18 C) 19 D) 20 E) 21

2.



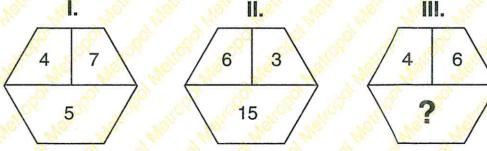
- A) $\frac{15}{100}$ B) $\frac{17}{144}$ C) $\frac{243}{15}$
D) $\frac{15}{223}$ E) $\frac{15}{243}$

3.



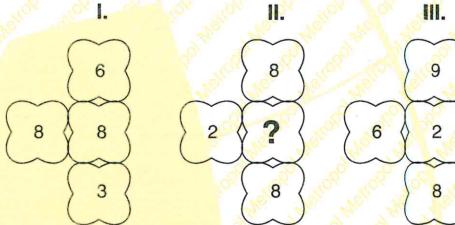
- A) 42 B) 43 C) 44 D) 45 E) 46

4.



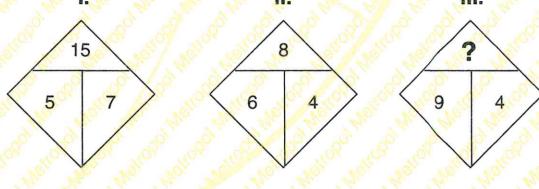
- A) 4 B) 6 C) 8 D) 10 E) 12

5.



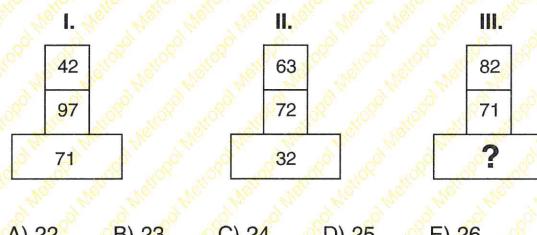
- A) 5 B) 6 C) 7 D) 8 E) 9

6.



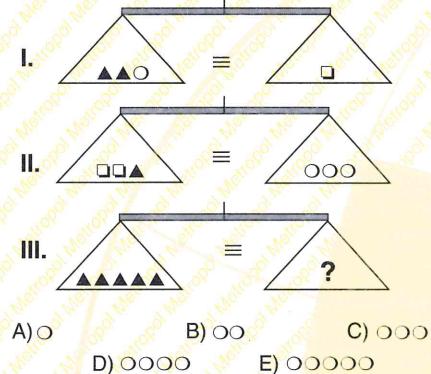
- A) 12 B) 15 C) 18 D) 21 E) 24

7.



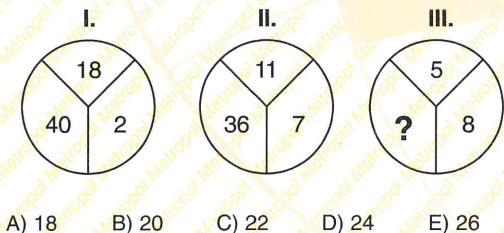
- A) 22 B) 23 C) 24 D) 25 E) 26

8.



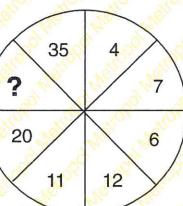
- A) ○ B) ○○ C) ○○○
D) ○○○○ E) ○○○○○

9.



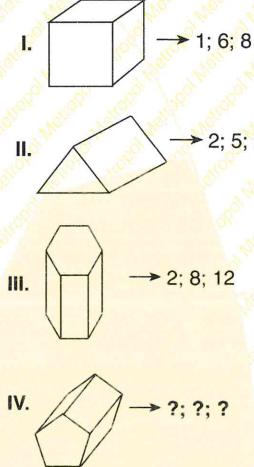
- A) 18 B) 20 C) 22 D) 24 E) 26

10.



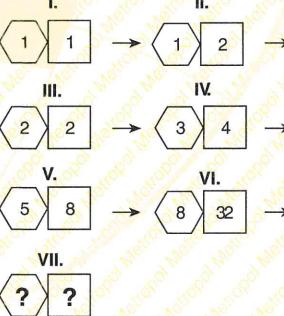
- A) 15 B) 16 C) 17 D) 18 E) 19

11.



- A) 2; 6; 12 B) 3; 6; 12 C) 1; 5; 12
D) 1; 7; 10 E) 2; 7; 10

12.

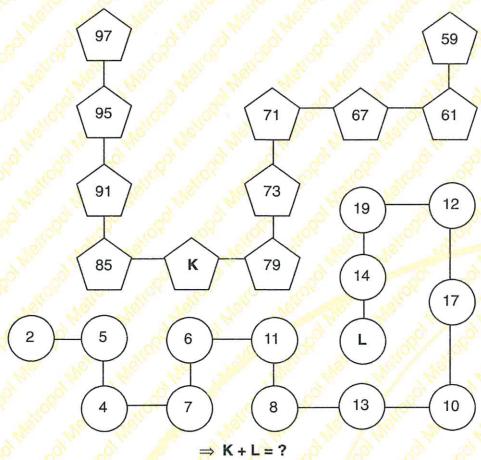


- A) 13, 232 B) 12,288 C) 13,256
D) 12,264 E) 14,268

YANITLAR / ANSWERS

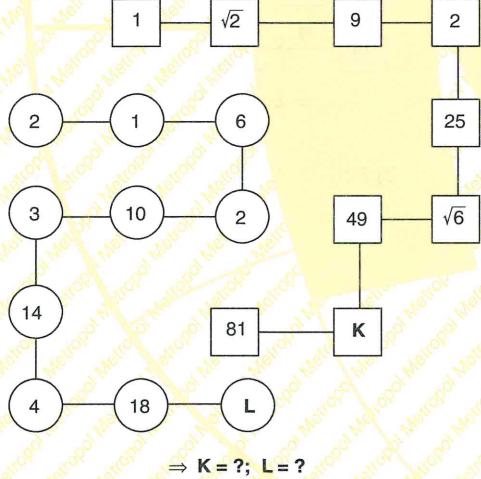
1	2	3	4	5	6	7	8	9	10	11	12
B	E	D	B	C	C	B	A	E	C	E	C

1



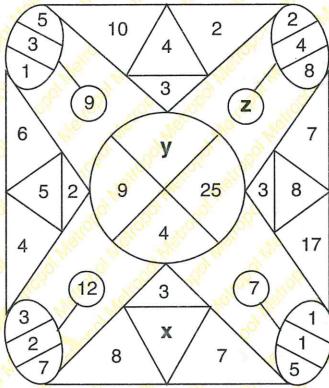
- A) 105 B) 106 C) 107 D) 108 E) 109

2



- | | K | L |
|----|-------------|---|
| A) | 1 | 3 |
| B) | $\sqrt{2}$ | 4 |
| C) | $2\sqrt{2}$ | 4 |
| D) | $\sqrt{2}$ | 5 |
| E) | $2\sqrt{2}$ | 5 |

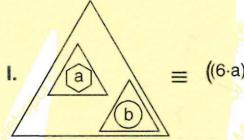
1



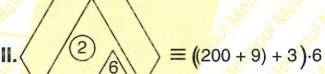
$$\Rightarrow x + y + z = ?$$

- A) 20 B) 24 C) 28 D) 32 E) 36

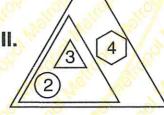
NET



$$\text{I. } \begin{array}{c} \triangle \\ | \\ \text{a} \\ | \\ \triangle \end{array} \equiv ((6 \cdot a) + 3) + ((b00) + 3) + 3$$



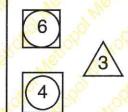
$$\text{II. } \left\langle \begin{array}{c} (2) \\ \diagup \quad \diagdown \\ C \end{array} \right\rangle \equiv ((200 + 9) + 3) \cdot 6$$

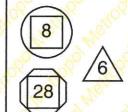


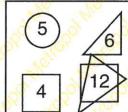
A) 228 B) 229 C) 231 D) 232 E) 236

- A) 228 B) 229 C) 231 D) 232 E) 236

5.

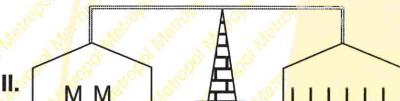
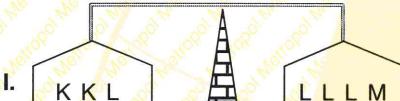
I.  $\equiv \left(\frac{36}{4} + 4 + 1\right)$

II.  $\equiv 7$

III.  $\equiv ?$

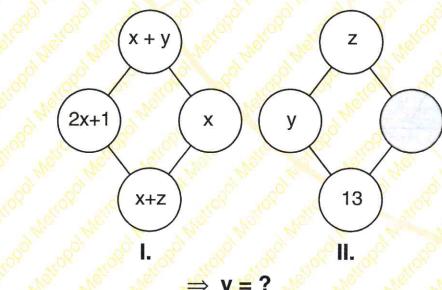
- A) 36 B) 33 C) 29 D) 25 E) 16

6.



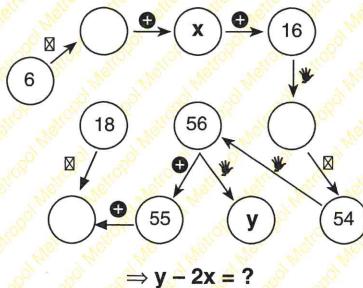
- A) L B) LL C) LLL
D) LLLL E) LLLLL

7.



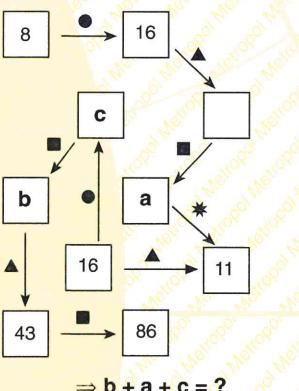
- A) 3 B) 6 C) 7 D) 10 E) 13

8.



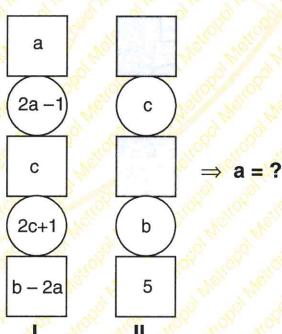
- A) 22 B) 23 C) 24 D) 25 E) 26

9.



- A) 86 B) 88 C) 90 D) 92 E) 94

10.



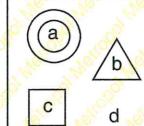
- A) 1 B) 3 C) 5 D) 7 E) 11

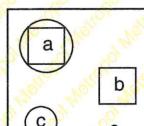


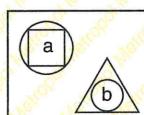
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10
B	E	A	E	C	E	C	C	E	B

1.

I.  $\equiv (a^2)^2 + 3b + 4c + d$

II.  $\equiv (4a)^2 + c^2 + 4b + e$

III.  $\equiv ?$

A) $(a^2)^2 + (b^2)^3 + c$

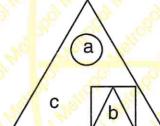
B) $16a^2 + 3(b^2) + c$

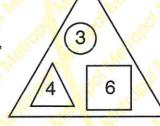
C) $8a^4 + 3b^2 + (c)^2$

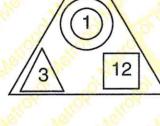
D) $(2a)^4 + b^2 + c$

E) $4a^2 + 3b^2 + c^2$

2.

I.  $\equiv \left(a^2 + \frac{6b + c}{4}\right) \cdot 6$

II.  $\equiv 6 \cdot \left(3^2 + (6 \cdot 4) + \frac{6}{4}\right)$

III.  $\equiv ?$

A) 62

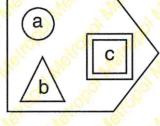
B) 66

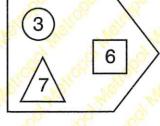
C) 126

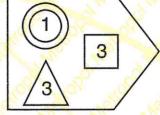
D) 132

E) 136

3.

I.  $\equiv \frac{2a + 3b + 4 - (4c)}{5}$

II.  $\equiv \frac{6 + 21 + 24}{5}$

III.  $\equiv ?$

A) 4

B) 5

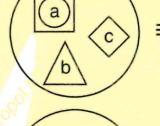
C) 6

D) 7

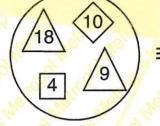
E) 8

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4.

I.  $\equiv \left(\frac{(a^2)}{4} \times \frac{b}{3} \times \frac{c}{5}\right)^2$

II.  $\equiv \left(\left(\frac{1}{4}\right)^2 \times \left(\frac{7}{4}\right) \times \frac{6}{3}\right)^2$

III.  $\equiv ?$

A) $(48)^2$

B) $(36)^2$

C) $(24)^2$

D) $(18)^2$

E) $(12)^2$

Bölüm / Chapter 5

5.

I. $\equiv \left[\frac{a}{4} \cdot 3 \right]^2 \cdot 3$

II. $\equiv \frac{27}{4}$

III. $\equiv ?$

- A) 144 B) 72 C) 58 D) 36 E) 6

6.

I. $\equiv \frac{(a^2 + b)}{4} \times 6$

II. $\equiv \left(\frac{6}{4} + 2 \right)^2 \times 6$

III. $\equiv ?$

- A) $\frac{3}{8}$ B) $\frac{1}{4}$ C) $\frac{65}{32}$ D) $\frac{65}{16}$ E) $\frac{195}{2}$

7.

I. $\equiv ((4+5)+4)+(1+3)2^2 + 5$

II. $\equiv (25+3)+7+6$

III. $\equiv ?$

- A) 86 B) 87 C) 88 D) 89 E) 90

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8.

I. $\equiv (3 \cdot a + 4b + c0) + (d0 \cdot 4)$

II. $\equiv 204$

III. $\equiv ?$

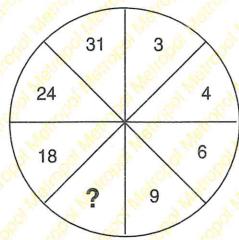
- A) 130 B) 132 C) 134 D) 136 E) 138



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
B	D	B	B	D	E	C	C

1.



- A) 13 B) 14 C) 15 D) 16 E) 17

2.

I.	<table border="1"> <tr><td>3</td><td>6</td><td>18</td></tr> <tr><td>2</td><td>4</td><td>12</td></tr> </table>	3	6	18	2	4	12
3	6	18					
2	4	12					
II.	<table border="1"> <tr><td>12</td><td>24</td><td>K</td></tr> <tr><td>8</td><td></td><td>48</td></tr> </table>	12	24	K	8		48
12	24	K					
8		48					
III.	<table border="1"> <tr><td>9</td><td>18</td><td>54</td></tr> <tr><td>6</td><td>12</td><td>36</td></tr> </table>	9	18	54	6	12	36
9	18	54					
6	12	36					

- A) 9; 24 B) 12; 48 C) 12; 54
D) 16; 64 E) 16; 72

3.

3	7	5	?
8	24	29	28
5	9	8	6

- A) 9 B) 4 C) 2 D) 1 E) 10

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4.

I.	9	15	21
	3	5	A

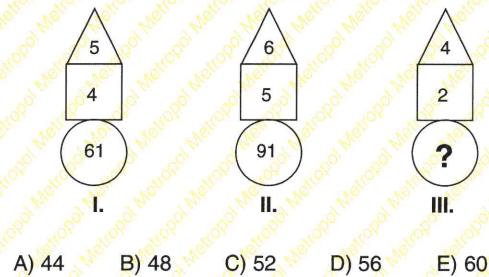
II.	9	12	20
	2	5	B

III.	4	16	24
	2	8	C

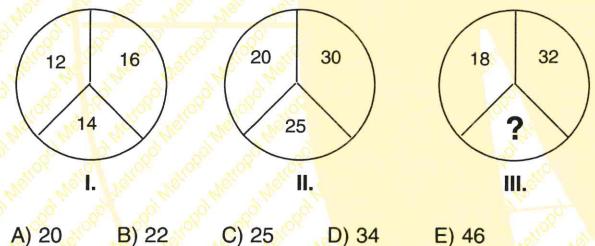
$$\Rightarrow A + B + C = ?$$

- A) 27 B) 30 C) 32 D) 34 E) 36

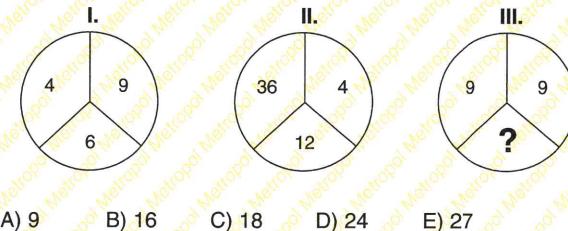
5.



6.

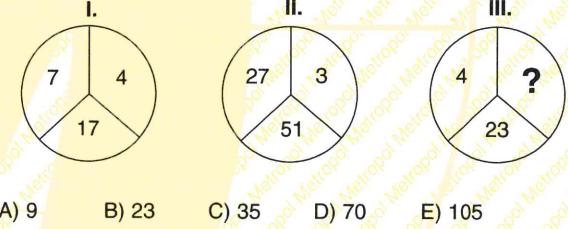


7.



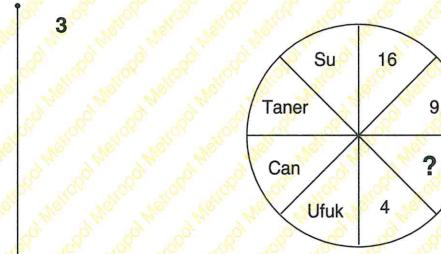
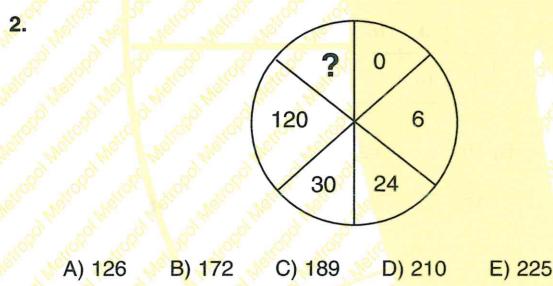
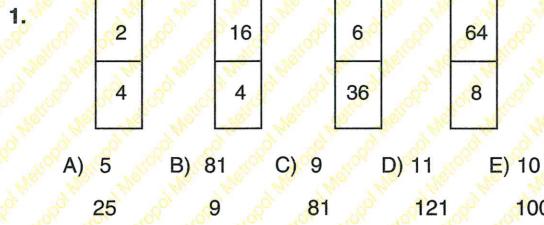
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8.

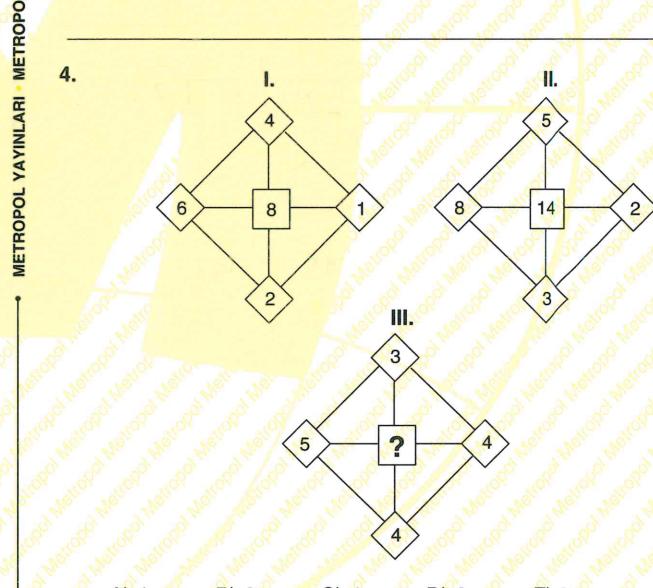


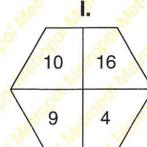
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
A	E	A	C	D	C	A	A

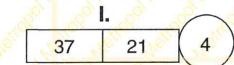


- A) 5 B) 10 C) 15 D) 20 E) 25

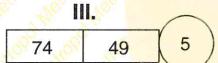
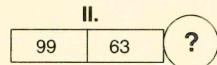
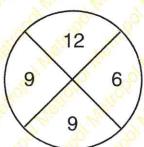


5.

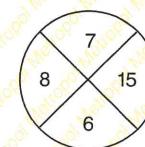
- A) 13 B) 14 C) 15 D) 16 E) 17



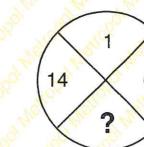
- A) 3 B) 4 C) 5 D) 6 E) 7

**6.****7.**

- A) 12 B) 13 C) 14 D) 15 E) 16



- A) 12 B) 13 C) 14 D) 15 E) 16



- A) 12 B) 13 C) 14 D) 15 E) 16

METROPOL YAYINLARI METROPOL PUBLICATIONS

8.

5	6	9	16	21	34	?
4	6	10	14	24	30	?

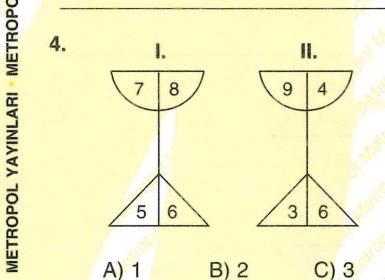
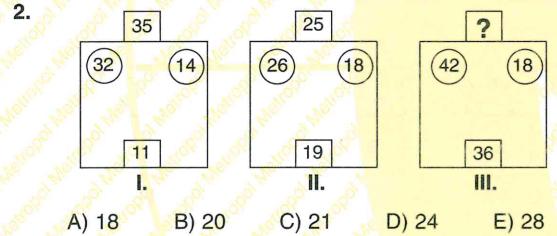
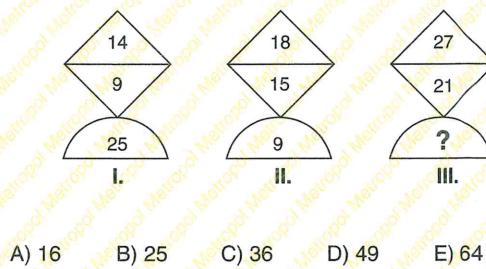
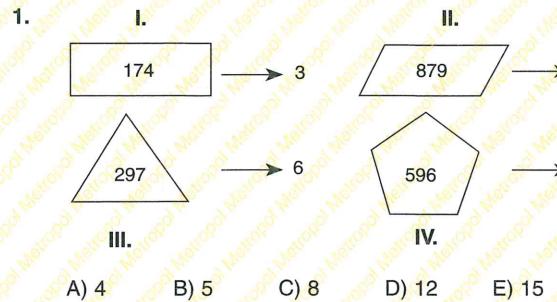
- A) 41 B) 40 C) 42 D) 41 E) 40

- 46 47 45 36 46

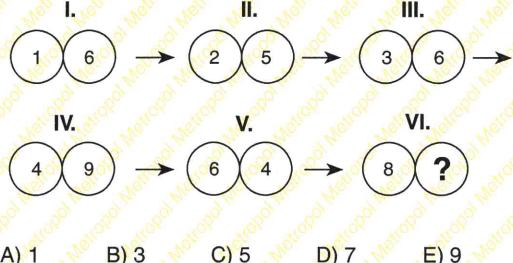


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
E	A	E	E	B	D	D	A

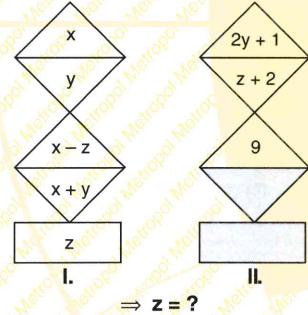


5.



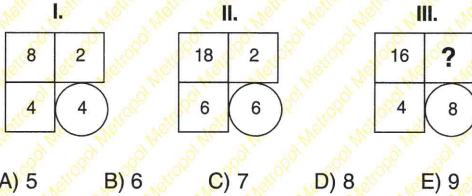
- A) 1 B) 3 C) 5 D) 7 E) 9

6.



- A) 14 B) 13 C) 8 D) 6 E) 4

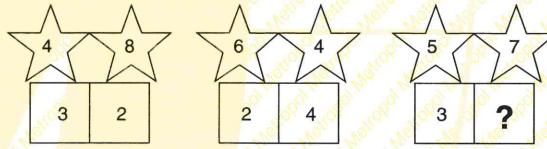
7.



- A) 5 B) 6 C) 7 D) 8 E) 9

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8.

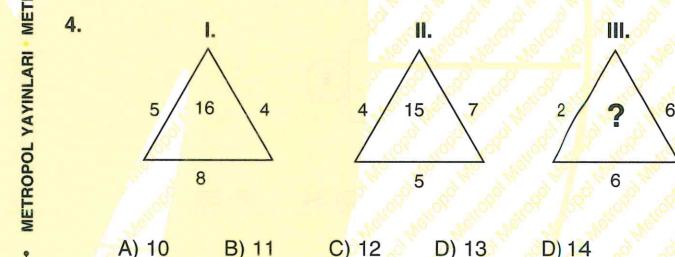
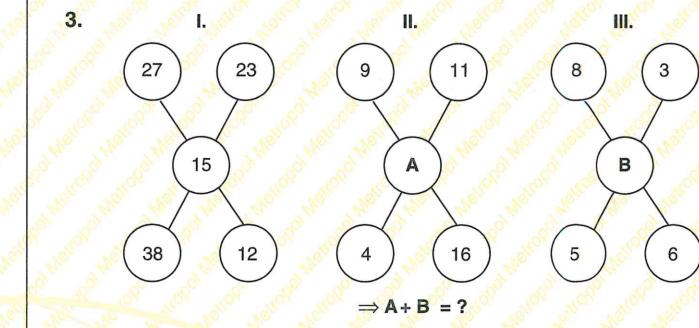
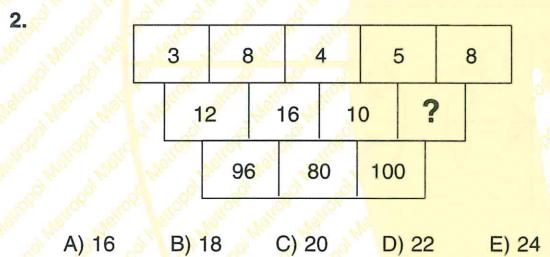
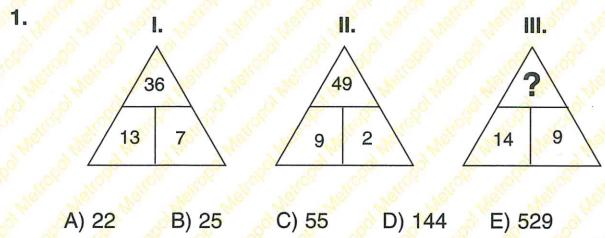


- A) 4 B) 5 C) 6 D) 7 E) 8

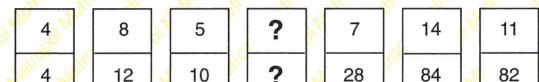


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
A	D	C	B	A	E	D	B



5.



A)

9	
14	

B)

9	
16	

C)

10	
22	

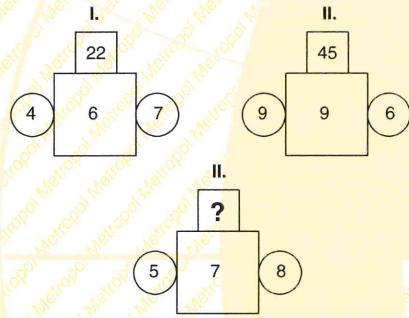
D)

10	
30	

E)

12	
32	

6.



A) 31

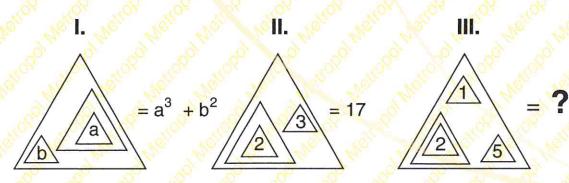
B) 32

C) 33

D) 34

E) 35

7.



A) 9

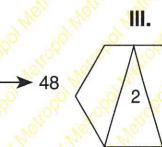
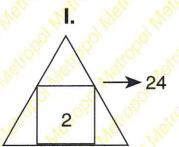
B) 14

C) 17

D) 26

E) 34

8.



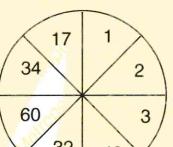
A) 12 B) 24

C) 36 D) 48

E) 54

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9.



A) 52 B) 57

C) 64 D) 68

E) 74

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
B	C	C	D	D	C	E	C	A

BÖLÜM

06

CHAPTER

TABLOLAR

TABLES

Bölüm / Chapter **6**

Test **1**

1.

2	6	1	4	13
3	4	2	5	14
1	2	8	3	y
6	48	16	x	

- A) 26 B) 54 C) 68 D) 74 E) 108

$$\Rightarrow x + y = ?$$

2.

12	34	20	22
13	18	14	15
25	32	90	?

- A) 28 B) 32 C) 49 D) 53 E) 72

Tablolara / Tables

4.

+	a	b	c
a			
b			a+1
c		a	

$$\Rightarrow a = ?$$

- A) 3 B) 4 C) 6 D) 7 E) 8

11	7	8
2	3	3
2	☆	4

$$\Rightarrow \star = ?$$

- A) 21 B) 15 C) 12 D) 8 E) 5

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3.

9	8	5	6	7
8	5	3	4	3
17	39	?	20	40

- A) 15 B) 16 C) 17 D) 18 E) 19

2	14	4
6	3	3
1	3	☆

$$\Rightarrow \star = ?$$

- A) 2 B) 10 C) 16 D) 30 E) 42

7.

19	8	12
17	7	11
6	3	\star

$$\Rightarrow \star = ?$$

- A) 15 B) 12 C) 9 D) 7 E) 4

8.

x	a	b	c
a		15	
b			20
c	12		

$$\Rightarrow c^2 = ?$$

- A) 4 B) 9 C) 16 D) 25 E) 36

9.

x	a	b	c
a		4c	
b			9a
c	b		

$$0 < a$$

$$0 < b$$

$$0 < c$$

$$\Rightarrow a + b + c = ?$$

- A) 2 B) 3 C) 6 D) 11 E) 13

10.

+	a	b	c
a	c+1		8
b			9

$$\Rightarrow a + b = ?$$

- A) 17 B) 13 C) 9 D) 7 E) 5

11.

+	b	c
a	11	9
b		8

$$\Rightarrow b + c - a = ?$$

- A) 2 B) 3 C) 4 D) 7 E) 9

12.

★	4	6	8
2	C	4	5
10	A	8	9
14	9	10	B

$$\Rightarrow A = ?$$

$$\Rightarrow B = ?$$

$$\Rightarrow C = ?$$

- | | | | |
|----|---|----|---|
| A) | 6 | 6 | 2 |
| B) | 6 | 8 | 2 |
| C) | 7 | 10 | 3 |
| D) | 7 | 11 | 3 |
| E) | 8 | 11 | 3 |

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	C	E	A	E	C	D	D	A	D

1.

▲	3	6	4
8	22	4	8
5	8	22	18
3	?	?	?

- A) 6, 9, 7 B) 12, 18, 14 C) 9, 9, 7
D) 6, 18, 14 E) 6, 18, 7

2.

18	9	3
2	6	2
26	?	4

- A) 19 B) 23 C) 34 D) 38 E) 42

3.

12	23	44
34	65	126
44	85	166
21	?	83

- A) 38 B) 39 C) 41 D) 42 E) 43

4.

3	5	9
4	7	13
5	?	17

- A) 9 B) 12 C) 15 D) 18 E) 21

5.

250	50	10
144	24	6
27	?	?
8	4	2

- A) 30,6 B) 24,6 C) 36,6 D) 9,3 E) 24,3

6.

2	7	3
4	13	7
6	19	11
8	25	?

- A) 13 B) 14 C) 15 D) 16 E) 17

7.

●	9	6	7
3	18	9	K
5	M	3	6
2	21	L	15

$$\Rightarrow K + L + M = ?$$

- A) 27 B) 30 C) 33 D) 36 E) 39

8.

+	a	b	c
a		2c+3	
b			a+9
c	2-b		

$$\Rightarrow a + b + c = ?$$

- A) 32 B) 33 C) 34 D) 35 E) 36

9.

★	3	4	5
8	55	48	A
9	72	B	56
6	C	20	11

$$\Rightarrow A + B + C = ?$$

- A) 98 B) 101 C) 109 D) 121 E) 131

10.

4	16	21	19
6	18	23	21
33	45	?	48
12	34	39	37

- A) 30 B) 44 C) 50 D) 52 E) 58

11.

9	4	7	6	4	20
6	5	6	9	8	17
9	2	5	K	3	L

$$\Rightarrow K + L = ?$$

- A) 18 B) 19 C) 20 D) 21 E) 22

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12.

+	a	b	c
a		c-3	
b			a+11
c	b+13		

$$\Rightarrow a + b + c = ?$$

- A) 17 B) 18 C) 19 D) 20 E) 21

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	D	D	A	D	C	D	B	E	C	D	E

1.

	8	7	3	4
6	4	3	-1	0
5	3	2	-2	-1
7	5	4	0	1
8	I	II	III	IV

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

$$\Rightarrow \text{IV} = ?$$

- A) (7, 6, 4, 2) B) (6, 5, 1, 2) C) (7, 6, 3, 2)
D) (8, 6, 1, 2) E) (6, 4, 2, 1)

2.

	3	7	9	8
5	8	2	4	3
3	6	★	6	5
7	★	0	2	1
1	4	I	II	III

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

- A) (8, 1, 9) B) (8, ★, 9) C) (8, ★, 7)
D) (9, ★, 8) E) (6, ★, 8)

3.

	7	5	4	6
3	★	15	7	9
5	35	★	9	11
6	13	11	★	0
4	11	I	II	III

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

- A) 9; 0; ★ B) 9; 0; 2 C) 20; 8, ★
D) 20; 16; 10 E) 1; 8; 2

4.

	2	5	8
4	3	★	6
6	4	★	7
10	I	II	III

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

- A) (12, ★, 18) B) (★, ★, 6) C) (6, ★, 18)
D) (8, ★, ★) E) (6, ★, 9)

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5.

	3	5	6
7	25	36	★
8	★	★	49
5	I	II	III

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

- A) (16, 25, ★) B) (8, 10, 11) C) (4, 5, ★)
D) (12, 10, ★) E) (16, ★, 25)

6.

	3	4	6
7	10	22	26
8	22	4	2
9	I	II	III

$$\Rightarrow \text{I} = ?$$

$$\Rightarrow \text{II} = ?$$

$$\Rightarrow \text{III} = ?$$

- A) (12, 13, 15) B) (12, 26, 30) C) (12, 16, 18)
D) (12, 26, 15) E) (12, 13, 18)

7.

	2	3	5
8	16	★	★
6	9	4	★
9	I	II	III

$$\begin{aligned} \Rightarrow I &= ? \\ \Rightarrow II &= ? \\ \Rightarrow III &= ? \end{aligned}$$

- A) (\star, \star, \star) B) ($\star, 9, 9$) C) ($9, \star, \star$)
 D) ($\star, 9, \star$) E) ($9, 9, \star$)

8.

2	4	8
4	$2+A$	$10+A$
$3+B$	16	32

$$\Rightarrow A + B = ?$$

- A) 6 B) 7 C) 8 D) 10 E) 11

9.

6	12	$8A$
9	$6A$	$12A$
3	$2A$	CA

$$\Rightarrow A + C = ?$$

- A) 4 B) 5 C) 6 D) 7 E) 8

10.

5	3	4
6	—	A
15	C	5

$$\Rightarrow A \cdot B \cdot C = ?$$

- A) 10 B) 12 C) 20 D) 22 E) 24

11.

4	6	3
7	17	29
5	11	K

$$\Rightarrow K + L + M = ?$$

- A) 20 B) 21 C) 22 D) 23 E) 24

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12.

4	20
6	$B \times 5$
A	$5A$
135	—

$$\Rightarrow A + B = ?$$

- A) 10 B) 12 C) 13 D) 14 E) 15



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	A	E	A	B	D	E	D	E	C	E

1.

A	VA	RVA	MRVA	UMRVA
T	KT	UKT	GUTK	FGUKT
B	CB	ECB	DEC B	İDECB
Z	İZ	ÇİZ	ĞÇİZ	ÖĞÇİZ
N	LN	JLN	HJLN	Δ□

 $\Rightarrow \Delta \square = ?$

- A) HHJLM B) JHJLN C) LHJLN
D) SHJLN E) NHJLN

2.

→	■	▲	●
3	27	9	18
6	A	36	180
5	125	25	Z
4	64	16	48

 $\Rightarrow A = ?$

- A) 24 B) 72 C) 144 D) 172 E) 216

3.

4	9	4	3	2	?
3	3	3	1	11	1
1	2	4	2	8	2
2	9	7	5	3	5
2	3	5	7	9	7

- A) 4 B) 3 C) 9 D) 2 E) 5

4.

2	3	4
7	8	7
27	23	13

 $\Rightarrow \blacksquare = ?$ $\Rightarrow \bullet = ?$ $\Rightarrow \blacktriangle = ?$

- A) 107, 68, 25 B) 107, 60, 23 C) 108, 50, 22

- D) 108, 65, 13 E) 109, 55, 17

5.

Sonuç (Result)				
4	8	5	3	17
9	4	6	4	12
7	5	8	3	11
6	3	5	2	?

- A) 6 B) 7 C) 8 D) 9 E) 10

6.

4	6	7	5
3	2	4	2
2	5	2	7
14	31	18	17
10	29	38	?

Sonuç
(Result)

- A) 53 B) 54 C) 55 D) 56 E) 57

7.

●	4	8	3
2		8	
6	20		L
7	K	48	18

$\Rightarrow K + L = ?$

- A) 38 B) 39 C) 40 D) 41 E) 42

8.

♦	5	6	9
10	15	L	
15	K	21	M
21	4		60

$\Rightarrow K + L + M = ?$

- A) 99 B) 100 C) 101 D) 102 E) 103

9.

2	7	23
2	19	59
26	■	86

$\Rightarrow ■ = ?$

- A) 20 B) 24 C) 28 D) 30 E) 36

10.

+	a	b	c
a		2c+2	
b			a
c	5b-4		

$\Rightarrow c - b = ?$

- A) 2 B) 4 C) 6 D) 8 E) 10

11.

8	12	17	23
10	14	19	25
12	16	21	27
14	18	23	?

- A) 25 B) 27 C) 29 D) 36 E) 46

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12.

1	2	6	8
2	3	8	14
5	6	14	44
10	11	24	?

- A) 48 B) 72 C) 112 D) 120 E) 134



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	E	B	A	C	A	B	D	A	A	C	E

1.

	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="circle"/>
<input type="circle"/>		16	
<input type="triangle"/>		?	
<input type="square"/>	16		
<input type="triangle"/>		20	30

- A) 8 B) 12 C) 16 D) 20 E) 24

2.

6	7	4	8	2
9	3	?	4	3
9	3	1	5	6

- A) 1 B) 2 C) 3 D) 4 E) 5

3.

	32	28	19
3	?		7
9		10	
13	10		

- A) 9 B) 10 C) 11 D) 12 E) 13

4.

+	a	b	c
a	x		
b		y	
c			z

- A) 6 B) 9 C) 12 D) 15 E) 18

$$\begin{aligned} a, b, c &\in \mathbb{Z}^+ \\ 2y &= x < z \\ \Rightarrow \min(a+b+c) &=? \end{aligned}$$

5.

	<input type="circle"/>	<input type="checkbox"/>	<input type="triangle-down"/>
5		?	10
7	42		14
9	54	45	

- A) 25 B) 15 C) 8 D) 5 E) 0

6.

1	6	9		13
2	2	5		15
0	6	4		8
0	8	1		?
4	0	0		

- A) 10 B) 9 C) 8 D) 7 E) 6

7.

	2	6	7
5	?		43
8			52
3	17		

- A) 12 B) 17 C) 23 D) 29 E) 34

8.

7	12	16	17	14
2	7	11	12	?
6	11	15	16	13
5	9	10	7	

- A) 7 B) 8 C) 9 D) 10 E) 11

9.

+	a	b	c
a	b		
b		c+a	
c	2-b		

- A) 5 B) 10 C) 15 D) 20 E) 25

$$\begin{aligned} a + b + c &= 30 \\ \Rightarrow b &=? \end{aligned}$$

10.

216	561	?	24
6	1	2	4
1	6	7	2
2	5	1	0

- A) 102 B) 134 C) 151 D) 172 E) 193

11.

5	6	3	0
2	2	0	4
7	2	1	4
4	8	3	2
?	6	2	4

- A) 0 B) 1 C) 2 D) 3 E) 4

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12.

	9	8	14
13	2	1	
5		3	K
29	L		3

$$\Rightarrow K + L = ?$$

- A) 16 B) 17 C) 18 D) 19 E) 20

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
D	D	C	A	A	B	C	C	B	D	E	B

1.

+	a	b	c
a		c	
b			4a+3
c	2a+2		

$$\Rightarrow c = ?$$

- A) 3 B) 4 C) 5 D) 6 E) 7

2.

x	a	b	c
a		432	288
b			
c	384		

$$\Rightarrow a + b + c = ?$$

- A) 54 B) 56 C) 58 D) 60 E) 62

3.

+	a	b	c
a			b-2
b			
c			

x	a	b	c
a	3-b		2-b
b			
c			b+4

$$\Rightarrow 2b + 7 = ?$$

- A) $\frac{b}{4}$ B) $\frac{b}{2}$ C) $\frac{1}{b}$ D) b^2 E) b^3

Tablolar / Tables

4.

+	a	b	c
a			K
b			L
c	M		

$$\Rightarrow 3b - 2a - c = ?$$

- A) $L + 2K + 3M$
B) $2M - 3K + L$
C) $K - 2L + 3M$
D) $2M - K + 63L$
E) $K + 2L - 3M$

5.

+	a	b	c
a		x	
b			y
c	z		

$$\Rightarrow x^2 + y^2 + z^2 = ?$$

- A) $\frac{K+L+M}{4}$
B) $\frac{K+L+M}{2}$
C) $K + L + M$
D) $2 \cdot (K + L + M)$
E) $3 \cdot (K + L + M)$

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6.

$\sqrt{+}$	a	b	c
a		$2\sqrt{6}$	
b			
c	$3\sqrt{2}$		

$$\Rightarrow a = ?$$

- A) 16 B) 8 C) 4 D) 2 E) 1

7.

●	6	4	5
9	135	K	
8			61
3	L	37	

$$\Rightarrow K + L = ?$$

- A) 190 B) 191 C) 192 D) 193 E) 194

8.

*	9	8	6
7		11	
5	9		K
4		L	6

$$\Rightarrow K + L = ?$$

- A) 7 B) 8 C) 9 D) 10 E) 11

9.

◻	14	24	26
51	43	K	
62			44
81		72	L

$$\Rightarrow K + L = ?$$

- A) 113 B) 114 C) 115 D) 116 E) 117

10.

▲	42	53	34
71	28		K
28		36	
39	L		38

$$\Rightarrow K + L = ?$$

- A) 62 B) 63 C) 64 D) 65 E) 66

11.

●	3	6	8	5
4	7	0	32	L
2	5	K	0	10
7	0	42	56	35
9	2	5	M	4

$$\Rightarrow K + L + M = ?$$

- A) 32 B) 33 C) 34 D) 35 E) 36

12.

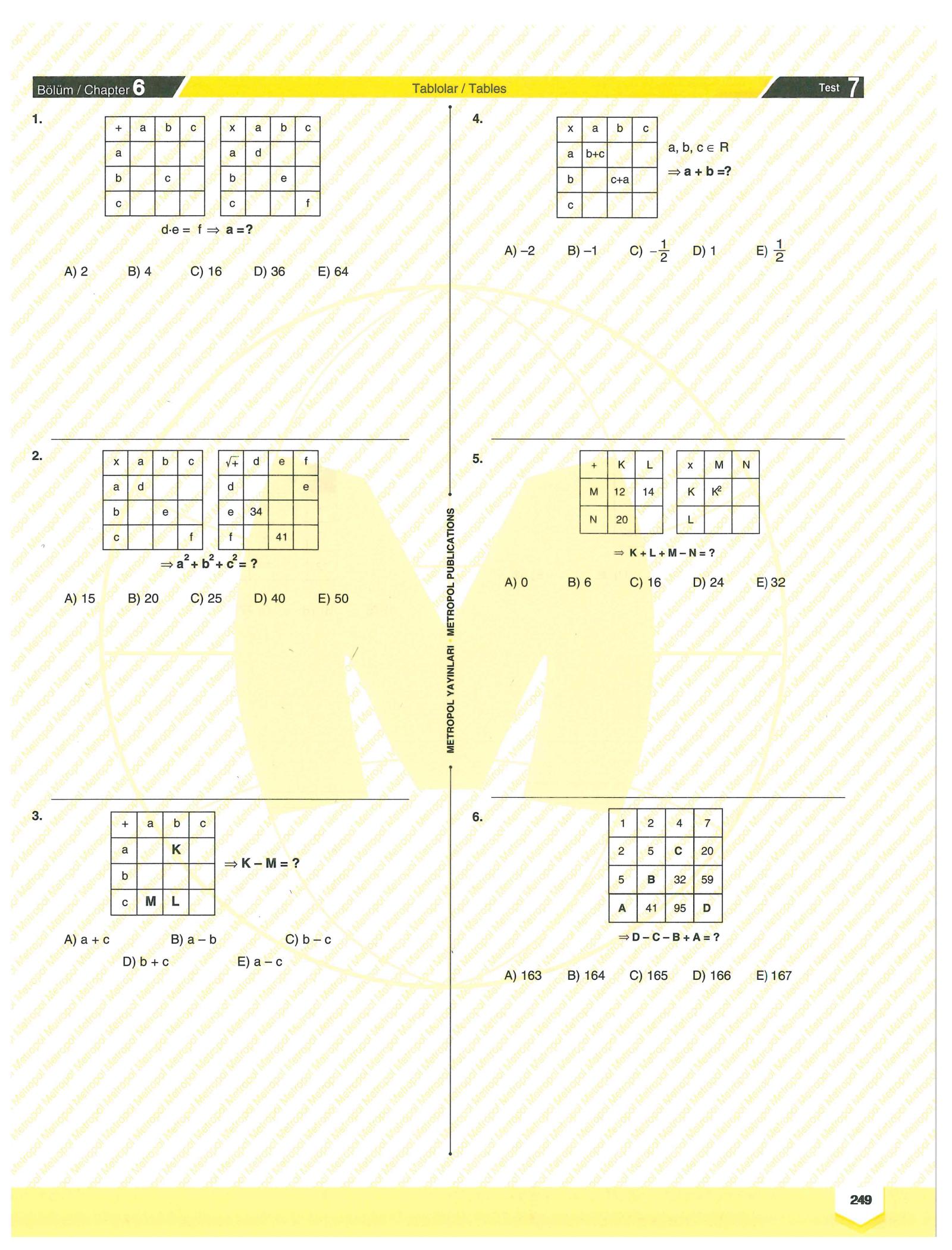
▼	3	6	8	6	5
7	10	K	56	42	12
4	12	2	4	M	20
3	L	18	24	18	8

$$\Rightarrow K + L + M = ?$$

- A) 42 B) 44 C) 46 D) 48 E) 50

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	D	E	E	A	B	D	E	D	E	E



7.

4	8	12	20
6	A	13	20
10	15	25	40
16	22	B	60

$$\Rightarrow B - A = ?$$

- A) 29 B) 30 C) 31 D) 32 E) 33

8.

3	4	12	48
1	2	2	4
3	8	?	192

- A) 24 B) 28 C) 32 D) 36 E) 42

9.

▲	4	8	12
3	14		
6			36

●	1	2	3
2			12
4			

$$\Rightarrow (4 \bullet 3) \Delta (6 \Delta 4) = ?$$

- A) 24 B) 44 C) 64 D) 88 E) 108

10.

▲	●	■
3	6	9
5	10	B

★	◆	-
12	6	D
24	E	8

$$\Rightarrow (A + B + C) - (D + E + F) = ?$$

- A) 21 B) 22 C) 23 D) 24 E) 25

11.

■	●	★	■
4	15	K	15
7	L	45	24

$$\Rightarrow K + L + M = ?$$

- A) 75 B) 76 C) 77 D) 78 E) 79

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12.

6	9	14	17
▲	35	K	75
●		40	60

$$\Rightarrow K + L + M = ?$$

- A) 141 B) 143 C) 145 D) 147 E) 149

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	C	C	B	B	C	C	A	D	C	D	B

1.

	△	□	○
○	27	36	K
□	15	M	25
○	L	32	40

	☆	■	×
2	6	9	X
5	30	Y	12
8	Z	39	18

$$\Rightarrow (X + Y + Z) - (K + L + M) = ?$$

- A) 13 B) 14 C) 15 D) 16 E) 17

2.

	△	7	4	6
3				9
5	M		11	
8	41			N

$$\Rightarrow M + N = ?$$

- A) 49 B) 51 C) 55 D) 57 E) 59

3.

x	a	b	c	d
a		35		
b				63
c			64	
d	45			

$$\Rightarrow (a + b) + (c + d) = ?$$

- A) 29 B) 31 C) 33 D) 34 E) 36

4.

x	a+b	c+4
a	d	
b	e	
c-4		d-e

$$\Rightarrow b = ?$$

- A) 1 B) 3 C) 4 D) 5 E) 7

5.

+	a	b	c
a		c	
b	c		
c			

$$\Rightarrow a - b + c = ?$$

- A) 14 B) 12 C) 8 D) 6 E) 5

6.

●	a	b	c
a	7	16	21
b	16	18	4
c	21	4	17

$$\Rightarrow a \bullet [(b \Delta c) \Delta c] = ?$$

- A) 7 B) 16 C) 17 D) 18 E) 21

7.

7	4	14
6	7	21
8	4	?

- A) 8 B) 10 C) 12 D) 16 E) 20

8.

12	2	8	22
6	11	13	30
7	?	14	36

- A) 12 B) 13 C) 14 D) 15 E) 16

9.

3	2	5
4	1	15
5	4	9
6	4	?

- A) 2 B) 6 C) 14 D) 20 E) 24

10.

4	5	3	4
3	4	2	2
37	61	19	?

- A) 12 B) 36 C) 56 D) 60 E) 84

11.

2	3	4	0	1
3		0		
	A	1	2	
C	1	2	B	
1		3		0

$$\Rightarrow (\mathbf{A}, \mathbf{B}, \mathbf{C}) \Rightarrow (? , ? , ?)$$

- A) (0,3,1) B) (0,3,0) C) (0,3,4)
D) (3,0,0) E) (3,4,0)

12.

x	A	B	C
A	B	D	F
B	D	K	L
C	F	L	M

+	A	B	C
A	B	C	D
B	C	D	E
C	D	E	F

$$\Rightarrow \frac{\mathbf{L} + \mathbf{M}}{\mathbf{E}} = ?$$

- A) (A) B) (B) C) (C) D) (D) E) (E)

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	D	A	C	D	B	D	D	D	C	B	C

1.

4	7	3	8
6	9	4	11
3	9	3	9
7	6	5	?

- A) 6 B) 7 C) 8 D) 9 E) 10

2.

4	6	10
3	5	4
7	4	45
6	1	?

- A) 2 B) 7 C) 13 D) 27 E) 35

3.

4	9	5	26	9
2	2	6	11	4
6	4	3	8	?
12	3	14	7	28

- A) 6 B) 9 C) 12 D) 15 E) 18

4.

2				8
5	B		9	
	10			
11	13			A

- A) 18 B) 21 C) 24 D) 27 E) 29

5.

3		7
	9	11
13		y
x	23	

$$\Rightarrow A + B = ?$$

- A) 30 B) 32 C) 35 D) 38 E) 41

6.

9	2	22
16	3	38
25	4	58
36	5	82
?	?	?

- A) 36,6,42 B) 36,8,84
D) 49,6,110 E) 49,7,112
C) 81,9,90

7.

2	9	4	51
3	8	1	21
6	9	7	22
3	4	9	?

- A) 11 B) 16 C) 23 D) 61 E) 82

8.

8	3	5	4
1	2	6	3
2	1	1	2
12	6	7	?

- A) 3 B) 5 C) 8 D) 11 E) 13

9.

7	6	9	4
5	3	8	2
1	10	11	3
5	7	3	14

Sonuç
(Result)

- A) 31 B) 32 C) 33 D) 34 E) 35

10.

4	3	22	5	2
6	1	27	7	3
8	4	?	5	6
7	6	57	5	3

- A) 54 B) 56 C) 58 D) 60 E) 62

11.

●	○	□	■
●	4	?	10
○	6	12	15
□	8	?	20

- A) 9; 18 B) 5; 12 C) 6; 14
D) 7; 15 E) 8; 16

12.

3	2	1	2
1	6	5	4
6	8	1	5
8	7	6	?

- A) 4 B) 5 C) 6 D) 7 E) 8

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1	2	3	4	5	6	7	8	9	10	11	12
C	E	D	C	D	D	D	B	C	E	E	D



YANITLAR / ANSWERS

1.

4	14	2
5	29	4
8	?	2

$\Rightarrow \text{?} = ?$

- A) 15 B) 18 C) 21 D) 24 E) 26

2.

2	9	19
6	3	9
4	4	?

$\Rightarrow \text{?} = ?$

- A) 8 B) 10 C) 16 D) 30 E) 42

3.

8	3	12	2
6	7	2	21
9	4	18	2
20	6	40	?

- A) 2 B) 3 C) 4 D) 5 E) 6

4.

9	8	7	3
6	9	3	5
7	6	2	1
8	7	18	?

- A) 18 B) 19 C) 20 D) 21 E) 22

5.

x	a	b	c
a	c	$\frac{c}{2}$	
b		2·a	
c			

$\Rightarrow a + b + c = ?$

- A) 72 B) 74 C) 76 D) 78 E) 80

6.

+	a	b	c
a		$c+8$	
b			a
c	$6 \cdot b$		

$\Rightarrow a \cdot b = ?$

- A) 52 B) 54 C) 56 D) 58 E) 60

7.

3	5	7
6	?	12
1	2	3

- A) 3 B) 4 C) 1 D) 9 E) 5

8.

1	8	3
4	27	7
4	1	?

- A) 5 B) 4 C) 2 D) 1 E) 0

9.

	6	9	4
12	24		K
14	L	67	
15		M	1

$$\Rightarrow K + L + M = ?$$

- A) 89 B) 90 C) 91 D) 92 E) 93

10.

+	a	b	c
a	b+1		
b			
c	b+6	a+12	

$$\Rightarrow b = ?$$

- A) 4 B) 5 C) 7 D) 8 E) 9

11.

x	a	b	c
a		2-c	
b			
c	b^2		

$$\begin{aligned} 2 \cdot b &= c \\ \Rightarrow a + b + c &= ? \end{aligned}$$

- A) 24 B) 26 C) 28 D) 30 E) 32

12.

x	a	b	c
a	b-c		
b		a^3	
c			a

$$\begin{aligned} a + b + c &= 14 \\ \Rightarrow a + b &= ? \end{aligned}$$

- A) 4 B) 6 C) 8 D) 10 E) 12

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	B	B	D	C	C	D	A	D	C	C	E

1.

+	a	b	c
a			b-a
b			3·a
c		a	b

$\Rightarrow c = ?$

- A) 5 B) 10 C) 15 D) 20 E) 25

2.

★	A	B	C
A	6	5	3
B	5	6	7
C	3	7	5

$$\Rightarrow (A \star C) \cdot 3 + ((B \star C) \cdot 7 + ((A \star B) \cdot 10) = ?$$

- A) 49 B) 50 C) 108 D) 110 E) 68

3.

	X	Y
4	64	4
6	144	9
A	B	1

$$\Rightarrow A \cdot B = ?$$

- A) 20 B) 22 C) 24 D) 30 E) 32

4.

	A	B
9	3	81
K	1	1
C	X	16

$$\Rightarrow K \cdot X + C = ?$$

- A) 10 B) 9 C) 8 D) 7 E) 6

5.

	4	7	8
5	81	144	169
2	36	?	100
3	49	100	121

- A) 49 B) 64 C) 81 D) 100 E) 121

6.

	2	7	5
6	4	29	19
9	7	?	31
4	2	17	11

- A) 44 B) 45 C) 46 D) 47 E) 48

7.

4	16	2
5	23	4
8	▲	2

 $\Rightarrow \blacktriangle = ?$

- A) 19 B) 22 C) 9 D) 28 E) 16

8.

2	9	19
6	3	9
4	4	■
2	10	22

 $\Rightarrow ■ = ?$

- A) 8 B) 10 C) 16 D) 30 E) 42

9.

19	8	12
17	7	11
6	3	●

 $\Rightarrow ● = ?$

- A) 15 B) 12 C) 9 D) 7 E) 4

10.

2	5	2
9	4	3
8	8	9
16	■	15

 $\Rightarrow ■ = ?$

- A) 21 B) 15 C) 12 D) 8 E) 5

11.

2	6	18
7	16	N
5	12	39

 $\Rightarrow N = ?$

- A) 25 B) 32 C) 42 D) 48 E) 53

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12.

+	a	b	c
a		c^2	$b+2$
b			
c		$a+8$	

 $\Rightarrow b = ?$

- A) 5 B) 8 C) 11 D) 14 E) 17


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	E	E	C	D	D	B	E	E	E	D

1.

4	3	5
9	4	7
2	2	2
8	?	28

- A) 1 B) 2 C) 4 D) 6 E) 8

2.

x	a	b	c
a	3-c	c	
b		a	81
c			

$$\Rightarrow a + b + c = ?$$

- A) 36 B) 37 C) 38 D) 39 E) 40

3.

+	a	b	c
a		c-1	
b			

x	a	b	c
a	c+1	c+4	
b		2-c	

$$\Rightarrow 2c^2 = ?$$

- A) $6c + 1$ B) $6c + 7$ C) $7c + 2$
D) $7c + 5$ E) $7c + 8$

Tablolar / Tables

4.

Sonuç (Result)	6	2	7	35
4	3	1	12	
8	3	2	51	
7	1	6	?	

- A) 54 B) 55 C) 56 D) 57 E) 58

5.

12	7	16	8
4	14	9	2
9	26	17	5
17	19	?	11

- A) 24 B) 26 C) 28 D) 30 E) 32

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6.

2	5	3	2
4	3	6	4
3	4	8	1
5	2	2	?

- A) 1 B) 2 C) 3 D) 4 E) 5

7.

2	7	4	3	5
7	3	4	5	4
1	3	2	2	6
2	4	5	4	?
8	3	6	3	5

- A) 1 B) 2 C) 3 D) 4 E) 5

8.

+ a b c	x a b c
a	a
b 3·c	b 3·a

$\Rightarrow a + b + c = ?$

- A) 16 B) 17 C) 18 D) 19 E) 20

9.

+ a b	x a b
a	a
b 17	b
c	c b-1 a+1

$\Rightarrow b = ?$

- A) 6 B) 7 C) 8 D) 9 E) 10

10.

+	a	b
c	10	11
d	11	12

x	a	b
c	24	30
d	28	35

$$\Rightarrow (c + d) - (a + b) = ?$$

- A) 3 B) 4 C) 7 D) 8 E) 10

11.

+	a	b	c
a	4·f		
b			e+2
c		14	

$$\Rightarrow b = ?$$

- A) 6 B) 7 C) 8 D) 9 E) 10

12.

+	a	b	c
a			2b
b	c		
c		5	

$$\Rightarrow \frac{a+c}{b} = ?$$

- A) 1 B) 2 C) 4 E) 6 E) 8

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	D	E	B	A	E	B	E	D	B	A	B

Tablolar / Tables

1.

+	a	b	c
a			7-c
b			
c			a

x	a	b	c
a			
b			
c			b

$$\Rightarrow a + c = ?$$

- A) 10 B) 15 C) 20 D) 25 E) 30

2.

+	a	b	c
a			
b		c	

x	a	b	c
a			
b			

$$\Rightarrow a + b = ?$$

- A) 40 B) 42 C) 44 D) 46 E) 48

3.

+	a	b	c
a			b/2
b			8-a

$$\Rightarrow c = ?$$

- A) 6 B) 8 C) 12 D) 18 E) 36

Tablolar / Tables

4.

+	a	b	c
a			
b		c	

$$\Rightarrow a + b + c = ?$$

- A) 18 B) 20 C) 22 D) 24 E) 26

5.

+	a	b	c
a			
b		c	

$$\Rightarrow c \cdot a = ?$$

- A) 24 B) 36 C) 42 D) 54 E) 64

6.

+	a	b	c
a			
b			

$$\Rightarrow K - L = ?$$

- A) 2 B) 3 C) 4 D) 5 E) 6

7.

+	a	b	c
a	b^5		
b		c	

x	a	b	c
a			
b			\sqrt{a}

$$\Rightarrow c = ?$$

- A) 2 B) 4 C) 8 D) 16 E) 32

8.

+	a	b	c
a			b
b			
c			$2 \cdot a$

x	a	b	c
a			
b			
c			

$$\Rightarrow a + b + c = ?$$

- A) 4 B) 6 C) 12 D) 18 E) 24

9.

+	a	b	c
a			10
b			

x	a	b	c
a		b^3	
b			c^4

$$\Rightarrow b = ?$$

- A) 2 B) 4 C) 8 D) 16 E) 32

10.

$\sqrt{+}$	a	b	c
a			4
b			
c	$\sqrt{11}$		

\sqrt{x}	a	b	c
a			e
b			
c			

$$\Rightarrow e^2 = ?$$

- A) 14 B) 18 C) 45 D) 54 E) 63

11.

+	a	b	c
a			
b		a	
c			b

x	a	b	c
a			
b			3-a
c		b^2	

$$\Rightarrow a + c = ?$$

- A) 18 B) 24 C) 30 D) 32 E) 36

12.

x	a	b	c
a			
b	8-c		2-a
c			

+	a	b	c
a			
b			
c	36		

$$\Rightarrow c = ?$$

- A) 12 B) 20 C) 24 D) 28 E) 32

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	B	C	D	D	D	B	E	B	B	C	A

1.

+	a	b	c
a			2b
b	c		
c			

x	a	b	c
a			
b			4
c	c		

$$\Rightarrow 2(a + b - c) = ?$$

- A) 0 B) 2 C) 4 D) 6 E) 8

2.

x	a	b	c
a			
b			7
c			

+	a	b	c
a			
b			16
c			

$$\Rightarrow a = ?$$

- A) 1 B) 4 C) 7 D) 11 E) 15

3.

x	a	b	c
a			
b			28
c	14		

$$\Rightarrow a > 6 \quad a + b - c = ?$$

- A) 1 B) 5 C) 9 D) 14 E) 19

4.

+	a	b	c
a			7
b			
c		13	

$$\Rightarrow c + (a + b) + 4 = ?$$

- A) 22 B) 36 C) 54 D) 72 E) 81

5.

x			
4			32
7	28	42	B
12	C	A	

$$\Rightarrow A = ?, B = ?, C = ?$$

A	B	C
52	56	48
72	72	52
60	63	48
72	49	63
72	56	48

6.

x	a	b	c
a			39
b			78

$$\Rightarrow a + b = 9 \\ c = ?$$

- A) 3 B) 6 C) 9 D) 11 E) 13

7.

+	A	B	C
A	B		
B		C	
C			?

- A) 2 B) 8 C) $2A + 4$ D) $4A$ E) $8A$

8.

x	a	b	c
a		14	
b			84
c	24		

$$\Rightarrow a + b + c = ?$$

- A) 9 B) 14 C) 19 D) 21 E) 23

9.

+	▲	■
▲	20	30
■		

x	▲	■
■	(4x■)	
▲		(6x▲)

$$\Rightarrow \blacksquare + \lozenge = ?$$

- A) 4 B) 6 C) 8 D) 11 E) 12

10.

x	a	b	c
a	9		
b		16	
c			

+	a	b	c
1	b	c	
2	c		

$$\Rightarrow \frac{a + b + c}{3} = ?$$

- A) 3 B) 4 C) 5 D) 6 E) 7

11.

x	a	b	c
a		12	
b			6
c	18		

$$\Rightarrow a + b + c = ?$$

- A) 11 B) 17 C) 18 D) 20 E) 22

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12.

+	A	B	C
A		14	
B			10
C	16		

$$\Rightarrow A + (B + C) = ?$$

- A) 100 B) 23 C) 75 D) 25 E) 30



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	E	E	A	E	E	E	D	D	B	A	E

1.

+	a	b	c
a		24	
b			21
c	43		

$$\Rightarrow c = ?$$

- A) 9 B) 10 C) 13 D) 16 E) 20

2.

+	a	b	c
a			24
b	2 · c	12	
c			

$$\Rightarrow 2c - a = ?$$

- A) 6 B) 10 C) 15 D) 18 E) 21

3.

x	a	b	c
K	1		c
L	6	b^2	12
M	10		

$$\Rightarrow \frac{a+b+c}{K+L+M} = ?$$

- A) $\frac{7}{19}$ B) $\frac{7}{18}$ C) $\frac{9}{18}$ D) $\frac{10}{17}$ E) $\frac{9}{17}$

4.

+	a	b	c
a	Δ	1	2
b			

$$0 \leq a, b, c \Rightarrow a + b + c = ?$$

- A) 0 B) 1 C) 2 D) 3 E) 4

5.

\square	\heartsuit	\diamond
1	5	K
2	L	10
3	1	2

$$\Rightarrow K = ? , L = ? , M = ?$$

K	L	M
6	8	4
4	8	3
6	7	4
4	8	4
6	8	3

6.

+	a+1	b+2	c+3
a	$c+1$		
b		4b	
c	d		19

$$\Rightarrow \frac{a+b+c}{d} = ?$$

- A) 1 B) 3 C) 4 D) 6 E) 8

7.

11	K	15	17
20	23	L	29
33	37	41	M
50	N	60	65

$$\Rightarrow K = ? , L = ? , M = ? , N = ?$$

	K	L	M	N
A)	13	26	45	50
B)	13	27	45	55
C)	12	26	44	50
D)	13	26	45	55
E)	13	24	43	63

8.

3	a	6	9
5	b	10	
7	7		c

$$\Rightarrow a + b + c = ?$$

- A) 5 B) 9 C) 13 D) 19 E) 29

9.

1	2	3	4	5
7	K	11	13	15
18	21	L	27	30
M	38	42	N	50
55	P	65	70	75
61	67	R	79	85

$$\Rightarrow K + L + N + P - R - M = ?$$

- A) 29 B) 30 C) 31 D) 32 E) 33

10.

9	14	7
2	13	?
19	3	8

- A) 13 B) 15 C) 16 D) 17 E) 19

11.

a	b	c
2		16
3	21	
4		36
5		40
6	42	54

$$\Rightarrow \frac{a + b + c}{3} = ?$$

- A) 4 B) 6 C) 7 D) 8 E) 12

12.

x	A	B	C
A		18	
B			
C	48		

$$\Rightarrow A + B - C = ?$$

- A) 0 B) 1 C) 2 D) 3 E) 4

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	A	E	D	E	A	D	E	D	B	D	B

7.

+	a	b	c
a		$c+5$	
b			$a+1$
c	$b+19$		

$$\Rightarrow a + b - c = ?$$

- A) 3 B) 5 C) 7 D) 9 E) 11

8.

+	a	b	c
a	b^2		
b			
c	$6-a$		$a-b$

$$\Rightarrow a + b = ?$$

- A) 12 B) 18 C) 24 D) 28 E) 32

9.

+	a	c	d	b
c			6	7
b				
a				8
d	7			

$$\Rightarrow \frac{a+b+c+d}{2} = ?$$

- A) 5 B) 6 C) 7 D) 8 E) 9

10.

x	a	b	c
a		$2 \cdot c$	
b			
c		$3 \cdot a$	

$$\Rightarrow d = ?$$

- A) 5 B) 6 C) 7 D) 8 E) 9

11.

+	a	b	c
a	c	m	k
b	m	e	n
c	k	n	b

$$(a \neq 0) \Rightarrow h + k + m + n + f = ?$$

- A) 120 B) 122 C) 124 D) 126 E) 128

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12.

x	a	b	c
d	12	20	8
e	21	35	14
f	18	30	12

$$\Rightarrow f - e + d - a + b - c = ?$$

- A) 1 B) 2 C) 3 D) 4 E) 5

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
A	C	D	A	C	D	B	A	C	A	C	C

1.

■	4	8	12
2	8	12	16
3	13	?	21
5	29	33	37

- A) 16 B) 17 C) 18 D) 19 E) 20

2.

▲	9	17	13
3	36	K	40
4	73	81	L

●	5	12	19
8	69	76	N
6	M	48	55

$$\Rightarrow (M + N) - (K + L) = ?$$

- A) 2 B) 3 C) 4 D) 5 E) 6

3.

	□	♥	♦
6	K	15	12
11	32	L	17
17	50	37	M

$$\Rightarrow K + L + M = ?$$

- A) 63 B) 64 C) 65 D) 66 E) 67

4.

◆	4	7	9
♥	6	K	71
♣	14	26	M

- A) 84 B) 85 C) 86 D) 87 E) 88

$$\Rightarrow K + L + M = ?$$

5.

x	3a	2b	c
a			21
2b			
3c	9b		

- A) 15 B) 17 C) 19 D) 21 E) 23

$$\Rightarrow b = ?$$

6.

x	a^2	b
a	c^2	c
b^2		c
c		a^2

- A) 27 B) 23 C) 17 D) 14 E) 11

$$\Rightarrow a + b + c = ?$$

7.

+	b	2b	3b
a		17	
2a			28
3a			

$$\Rightarrow a \cdot b = ?$$

- A) 24 B) 30 C) 32 D) 36 E) 40

8.

x	a	b	c
a	k	2-k	3-k
b			
c		96	

$$\Rightarrow a + b + c = ?$$

- A) 18 B) 24 C) 30 D) 36 E) 42

9.

+	2a	3b	4c
a			36
b	19		
c		16	

$$\Rightarrow a + b + c = ?$$

- A) 16 B) 18 C) 9 D) 21 E) 23

10.

+	c	b	a
a	k		
b	16	2-k	11
c			

$$\Rightarrow a + b + c = ?$$

- A) 14 B) 15 C) 16 D) 17 E) 18

11.

x	c	a	b
a	156		
b		168	
c			182

$$\Rightarrow a + b + c = ?$$

- A) 33 B) 35 C) 36 D) 37 E) 39

12.

x	b	c
a	18	b+9
c	30	?

- A) 9 B) 16 C) 25 D) 36 E) 49

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1	2	3	4	5	6	7	8	9	10	11	12
B	B	C	D	D	D	B	B	E	E	E	C



YANITLAR / ANSWERS

1.

+	a	b	c
a	b	c	d
b	c	e	f
c	d	f	h

x	a	b	c
a	a	b	c
b	b	d	h
c	c	h	j

$$\Rightarrow b^2 + \frac{a+b+c}{2c} = ?$$

A) 2a

B) $b - 2a$ C) $c - a$ D) $2c - 2b$ E) $1+d$

2.

+	a	b	c
a		$c+3$	
b			$2a+2$
c	$3b+3$		

$$\Rightarrow b = ?$$

A) 2

B) 5

C) 8

D) 11 E) 16

3.

	▲	□	⊕
4	11	L	8
8	K	18	24
11	32	24	M

$$\Rightarrow K + L + M = ?$$

A) 65

B) 66

C) 67

D) 68

E) 69

4.

*	1	2	3	4
1	1	K		
2		4	L	16
3			N	
4		16		M

$$\begin{aligned}\Rightarrow K &= ?, \\ \Rightarrow L &= ?, \\ \Rightarrow M &= ?, \\ \Rightarrow N &= ?\end{aligned}$$

	K	L	N	M
A)	1	8	9	256
B)	2	8	18	243
C)	2	16	9	243
D)	1	4	9	256
E)	1	8	27	256

5.

x	a	b	c
a	b	$\frac{c}{2}$	
b		c	
c			

$$\Rightarrow a + b + c = ?$$

A) 19

B) 20

C) 21

D) 22

E) 23

6.

+	a	b	c
d	13	14	15
e	14	15	16
f	15	16	17

$$\Rightarrow \frac{(a+b+c+d+e+f) - 30}{15} = ?$$

A) 1

B) 3

C) 5

D) 10

E) 15

7.

	a	b	c	d
1	9	11	K	15
2	8	L	12	M
3	N	9	P	13
4	6	R	10	12

$$\Rightarrow (K + L + M) - (N + P + R) = ?$$

- A) 9 B) 11 C) 13 D) 14 E) 16

8.

x	a	b	c
a	b		
b		a^4	4c
c		6b	

$$\Rightarrow \frac{a+b}{c} = ?$$

- A) 1 B) 2 C) 4 D) 8 E) 10

9.

		4	5	6
▲	1	K	6	7
■	2	18	L	
●	3		128	M

$$\Rightarrow K = ? \quad L = ? \quad M = ?$$

	K	L	M
A)	4	28	218
B)	4	27	218
C)	5	27	219
D)	5	28	219
E)	6	27	217

10.

+	a	b
c	4	
d		

$$\Rightarrow \begin{aligned} d + a &= 10 \\ a + b + c + d &=? \end{aligned}$$

- A) 12 B) 16 C) 18 D) 20 E) 24

11.

7	4	6	5	8
3	9	8	5	5
12	2	1	14	1
6	11	3	4	6
2	4	12	2	?

- A) 7 B) 8 C) 9 D) 10 E) 11

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12.

2	7	22	67
3		31	
4	13	A	121

$$\Rightarrow A + B = ?$$

2	5	14	
3		23	68
4	B		

- A) 49 B) 50 C) 51 D) 52 E) 53


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	C	E	E	D	A	B	A	C	B	D	C

1.

14	28	10	?
11	15	12	17
25	13	22	16

- A) 30 B) 31 C) 33 D) 35 E) 37

2.

7	1	2	4
5	4	3	3
11	3	?	7

- A) 1 B) 2 C) 4 D) 5 E) 6

3.

10	6	5	12
8	8	16	4
13	9	?	3

- A) 24 B) 27 C) 31 D) 39 E) 42

4.

7	5	7	12
9	3	3	18
?	4	5	15

- A) 8 B) 9 C) 10 D) 12 E) 13

5.

9	3	12
8	5	6
7	2	?

- A) 9 B) 10 C) 5 D) 14 E) 18

6.

5	4	6	3
12	3	7	8
7	11	9	?

- A) 3 B) 7 C) 9 D) 11 E) 13

7.

1	2	5
2	3	13
3	1	?

- A) 3 B) 6 C) 9 D) 10 E) 14

8.

7	3	14
8	2	16
9	6	?

- A) 9 B) 12 C) 14 D) 15 E) 18

9.

6	3	5	10
8	2	3	12
4	4	7	?

- A) 1 B) 3 C) 5 D) 7 E) 9

10.

3	6	9
2	2	4
1	?	1

- A) 0 B) 1 C) 2 D) 4 E) 5

11.

2	6	10
3	24	30
4	A	B

- A) 3 B) 5 C) 8 D) 10 E) 12

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12.

8	3	4	6
5	4	10	2
9	2	6	?

- A) 2 B) 3 C) 5 D) 6 E) 7



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	D	A	B	C	D	E	D	A	C	B

1.

♦	3	7	5	9
4	6	10	8	12
6	8	12	10	14
8	10	14	12	16
5	?	?	?	13

- A) 7,9,11 B) 9,7,16 C) 7,18,16
D) 11,9,16 E) 7,11,9

2.

	3	8	6	5
2	-	10	8	-
7	10	-	-	12
6	-	14	12	-
4	?	?	?	-

- A) 7, 12, 10 B) —, 11, — C) —, 12, 10
D) 7, 9, 11 E) —, —, 10

3.

+	a	b	c
a		14	13
b			11

x	a	b	c
a			d
b	f		
c		g	

$$\Rightarrow d + f + g = ?$$

- A) 94 B) 102 C) 118 D) 124 E) 136

Tablolar / Tables

4.

•	3	4	5	2
1	10	17	A	5
6	B	22	31	10
7	16	C	32	11

$$\Rightarrow A + B + C = ?$$

- A) 56 B) 62 C) 64 D) 78 E) 94

5.

\sqrt{x}	A	B	C
A	2		$3\sqrt{2}$
B	$2\sqrt{2}$		
C			

$$\Rightarrow A + B + C = ?$$

- A) 9 B) 10 C) 13 D) 15 E) 17

6.

$\sqrt{+}$	A	B	C
A		$2\sqrt{3}$	
B			4
C	$\sqrt{14}$		

$$\Rightarrow A \cdot B \cdot C = ?$$

- A) 185 B) 245 C) 296 D) 315 E) 385

7.

+	a	b	c
a		c+8	
b			a-2
c	b+6		

$$\Rightarrow a \cdot b \cdot c = ?$$

- A) 24 B) 28 C) 32 D) 36 E) 42

8.

13	30	15	32	C	35
23	A	26	43	29	46
17	34	19	36	22	39
25	42	28	B	31	48
22	39	24	41	27	44
27	44	30	47	33	50

$$\Rightarrow A + B + C = ?$$

- A) 98 B) 103 C) 107 D) 109 E) 112

9.

+	a	b	c	d
a		10		
b			12	
c				15
d	x			

$$x = ?$$

- A) 11 B) 13 C) 15 D) 17 E) 19

10.

x	a	b	c	d
a		8		
b			12	
c				15
d	k			

$$\Rightarrow k = ?$$

- A) 3 B) 5 C) 8 D) 10 E) 18

11.

I	1	2	4	x
II	3	4	4	y
III	3	5	6	z

$$\Rightarrow (x, y, z) = ?$$

- A) (3, 4, 6) B) (3, 5, 7) C) (2, 6, 5)
D) (3, 7, 5) E) (2, 5, 7)

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12.

11	14	18
15	?	24
19	24	30

- A) 12 B) 18 C) 19 D) 24 E) 17

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	C	C	C	D	D	F	B	B	D	B	C

1.

+	A	B	C
A			21
B	19		
C		22	

x	A	B	C
A		E	
B			D
C	F		

$$\Rightarrow D + E + F = ?$$

- A) 256 B) 274 C) 286 D) 318 E) 334

2.

*	3	6	8
2	7	34	A
4	B	32	60
5	4	C	59

$$\Rightarrow A + B + C = ?$$

- A) 87 B) 94 C) 98 D) 102 E) 117

3.

x	K	L	M
K		4-M	
L			18
M	48		

$$\Rightarrow K + L + M = ?$$

- A) 12 B) 14 C) 15 D) 16 E) 17

4.

★	○	□	
2	6	12	K
3	L	10	2
1	8	M	6

$$\Rightarrow K ; L ; M = ?$$

	K	L	M
A)	4	6	12
B)	8	4	16
C)	4	4	14
D)	8	6	14
E)	4	4	12

5.

x		x	x
x →	K	L	M
x →	K+1	1	3M
x →	M	2K	2
	24	24	24

$$\Rightarrow K ; L ; M = ?$$

	K	L	M
A)	4	3	2
B)	3	2	4
C)	3	4	2
D)	2	4	3
E)	2	3	4

6.

*	3	4	6
6	18	A	24
7	B	22	26
8	22	24	C

$$\Rightarrow A + B + C = ?$$

- A) 58 B) 62 C) 66 D) 68 E) 74

7.

12	6	2	9
13	9	1	22
6	8	2	7
3	9	4	?

- A) 3 B) 7 C) 9 D) 11 E) 14

8.

+	K	L	M
K	M	2M	
L			30
M			

$$\Rightarrow K = ?$$

- A) 3 B) 6 C) 12 D) 18 E) 24

9.

+	K	L	M
K		22	
L			17
M			

x	K	L	M
K			104
L			
M			

$$\Rightarrow M = ?$$

- A) 6 B) 8 C) 10 D) 12 E) 14

10.

3	8	24
4	11	61

$$\Rightarrow A + B + C = ?$$

- A) 107 B) 115 C) 126 D) 162 E) 184

11.

*	2	4	8	15
3	6	12	24	45
5	10	●	40	75
7	14	I	▲	II

$$\Rightarrow (I, II) = (? , ?)$$

- A) (28, 97) B) (28, 105) C) (20, 56)
D) (56, 21) E) (20, 96)

12.

+	a	b	c
a		c+5	
b			a+21
c	b+43		

$$\Rightarrow a + b + c = ?$$

- A) 67 B) 68 C) 69 D) 70 E) 71

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
D	C	E	C	C	D	A	B	B	D	B	C

1.

●	42	51	73
6	12		K
8		L	32
7	M	28	

$$\Rightarrow K + L + M = ?$$

- A) 68 B) 69 C) 70 D) 71 E) 72

2.

	7	5	12
6	K	9	
9		L	27
8	13		M

$$\Rightarrow K + L + M = ?$$

- A) 45 B) 47 C) 49 D) 51 E) 53

3.

+	a	b	c
a			b+1
b	2c+2		4a-1
c			

$$\Rightarrow a = ?$$

- A) 6 B) 9 C) 12 D) 14 E) 17

4.

	19	27	38
▲	24	15	K
■	L	18	22

$$\Rightarrow K + L + M = ?$$

- A) 46 B) 48 C) 50 D) 52 E) 54

5.

	85	32	53
K	81	x	16
L	9	1	y
M	z	1	8

$$\Rightarrow x + y + z = ?$$

- A) 32 B) 33 C) 34 D) 35 E) 36

6.

x	a	b	c
a			
b			a ²
c	b		a

$$\Rightarrow \frac{b}{c} = ?$$

- A) c B) c² C) b D) b² E) 1

7.

x	A	B	C	D
A	A	B	C	D
B	B	E	F	M
C	C	F	L	N
D	D	M	N	K

$$M - E = 2, F = 8, N = 12 \\ \Rightarrow A + B + C + D = ?$$

- A) 10 B) 12 C) 14 D) 18 E) 22

8.

4	2	1	6
2	4	1	6
3	3	2	7
9	2	8	?

- A) 1 B) 2 C) 3 D) 4 E) 5

9.

6	14	48	8
4	14	40	10
3	A	15	5
7	13	B	6

$$\Rightarrow A + B = ?$$

- A) 42 B) 48 C) 50 D) 54 E) 60

10.

1	4	5	9	A
2	3	B	8	13
4	1	5	6	11
7	2	9	C	20
6	3	9	12	D

- | A | B | C | D |
|----|----|---|----|
| A) | 10 | 6 | 12 |
| B) | 13 | 5 | 10 |
| C) | 14 | 6 | 11 |
| D) | 12 | 7 | 9 |
| E) | 14 | 5 | 11 |

11.

4	6	6	3
5	9	1	2
6	20	22	7
7	17	?	4

- A) 7 B) 10 C) 11 D) 18 E) 24

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12.

2	1	4	6	8
4	6	5	3	1
5	7	3	4	7
6	4	9	10	2
17	18	?	23	18

- A) 7 B) 15 C) 19 D) 21 E) 27



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	C	A	B	A	B	A	A	C	E	C	D

1.

★	3	7	4	1
4	6	10	7	4
2	4	8	5	2
6	8	12	9	6
5	7	?	?	?

- A) 10,7,5 B) 11,8,5 C) 11,7,6 D) 13,8,5 E) 10,8,6

2.

▲	2	5	4	6
7	-	12	-	-
3	-	8	-	-
8	10	-	12	14
1	-	?	?	?

- A) 6,5,7 B) 9,3,- C) 6,-,- D) 9,-,6 E) 6,5,-

3.

21	42	18	27
15	41	22	26
13	29	24	?

- A) 18 B) 20 C) 22 D) 27 E) 28

4.

Sonuç (Result)				
4	3	8	6	27
2	8	4	5	24
3	2	6	9	29
4	5	7	3	?

- A) 20 B) 22 C) 24 D) 26 E) 28

5.

Sonuç (Result)				
2	7	4	8	23
3	6	10	4	26
1	8	7	5	22
3	7	4	2	19
7	1	4	3	?

- A) 18 B) 20 C) 22 D) 23 E) 26

6.

●	□	■	
●	9	?	18
○	12	20	24
□	15	?	30

- A) 15,12 B) 9,12 C) 15, 25 D) 25, 25 E) 12,25

7.

7	4	9	6
5	3	1	4
6	7	?	2
2	6	4	8

- A) 5 B) 6 C) 7 D) 8 E) 9

8.

*	4	9	2	6
7	—	16	—	—
3	—	12	—	—
2	6	—	4	8
8	12	?	?	?

- A) -10,14 B) 17,10,14 C) -, -, 14
D) 17,-,12 E) -10,-

9.

5	15	11	26
4	12	8	20
6	18	?	30
3	?	11	20

- A) 12,12 B) 20,9 C) 12, 9
D) 8,9 E) 20,12

10.

64	8	12	24
16	4	8	?
4	2	9	18
49	?	3	6

- A) 3,8 B) 12,16 C) 7,12
D) 8,24 E) 7,16

11.

8	6	7	4
10	2	6	5
16	x	10	8
30	y	17	15

- A) 4 B) 6 C) 8 D) 10 E) 12

$$\Rightarrow x + y = ?$$

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12.

14	5	8	2
4	6	12	7
2	9	7	A
8	11	B	6

$$\Rightarrow A + B = ?$$

- A) 11 B) 14 C) 15 D) 19 E) 21

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
B	C	C	B	C	C	B	A	C	E	C	C

1.

+	x	y	z
x	t	2t	
y	24		

$$\Rightarrow x = ?$$

- A) 1 B) 3 C) 6 D) 8 E) 9

2.

x	k	l	m
k			96
l	80		30

$$\Rightarrow k \cdot l \cdot m = ?$$

- A) 320 B) 480 C) 540 D) 960 E) 1120

3.

+	x	y	z
x		25	48
y		26	

$$\Rightarrow z - x = ?$$

- A) 17 B) 19 C) 21 D) 24 E) 26

4.

x	a	b	c
a		10-c	
b			32

$$\Rightarrow a + b = ?$$

- A) 9 B) 12 C) 13 D) 16 E) 17

5.

+	a	b	c
a		28	
b			23

$$\Rightarrow a = ?$$

- A) 6 B) 11 C) 13 D) 14 E) 22

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6.

+	a	b	c
a			25
b	20	$\frac{a}{2}$	

$$\Rightarrow b + c = ?$$

- A) 9 B) 11 C) 13 D) 14 E) 16

7.

8	5	1	6
4	7	9	4
9	6	8	?
2	5	5	7

- A) 2 B) 4 C) 5 D) 6 E) 8

8.

6	4	10	8
3	7	5	9
7	8	1	2
4	6	?	5

- A) 2 B) 3 C) 5 D) 6 E) 7

9.

7	2	4	?
5	7	3	2
5	4	2	6
3	9	1	4

- A) 3 B) 4 C) 5 D) 6 E) 7

10.

2	8	5	4
3	9	6	6
1	7	4	2
2	4	?	?

- A) 3,4 B) 3,5 C) 4,4 D) 6,5 E) 7,2

11.

7	3	16	14
6	4	4	12
8	7	1	16
4	1	?	?

- A) 8,9 B) 10,8 C) 6,14 D) 9,8 E) 16,12

METROPOL YAYINLARI • METROPOL PUBLICATIONS

12.

6	4	3	5	9
5	7	9	3	8
6	6	8	2	20
3	9	4	5	?

- A) 6 B) 7 C) 8 D) 9 E) 10

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	D	C	B	C	D	B	B	A	D	B

1.

2	3	5	4
9	77	72	56
5	21	16	0
8	60	?	?
7	45	40	24
			33

- A) 48; 39; 55 B) 55; 39; 48 C) 39; 48; 55
 D) 29; 48; 55 E) 45; 29; 38

2.

a	b	c	d
76	38	—	19
105	—	35	—
64	32	—	16
144	?	?	?
			—

- A) -, 48, — B) 72, 48, 36 C) 54, 34, 26
 D) -, 34, 18 E) 48, 36, 72

3.

1	14	15	4
12	x	6	9
8	y	10	5
13	2	3	16

$$\Rightarrow x = ?; y = ?$$

- A) 11-7 B) 8-12
 D) 10-9 E) 6-12

4.

4	20	25
11	?	72
14	98	105

- A) 88 B) 60 C) 66 D) 40 E) 36

5.

+	a	b	c	d
a	3			
b				
c				
d			4	

$$\Rightarrow ac + bc + ad + bd = ?$$

- A) 12 B) 11 C) 10 D) 9 E) 7

6.

+	c	d
a		
b		

$$\Rightarrow (a \circ b) + (c \circ d) = ?$$

- A) 32 B) 37 C) 44 D) 48 E) 52

x	c	d
a	10	
b	9	

7.

+	a	b	c
a			$b - 5$
b	$3c - 1$		$6a - 1$
c			

$$\Rightarrow a = ?$$

- A) 4 B) 7 C) 11 D) 16 E) 19

8.

+	a	b	c
a		10	
b			9
c			

x	a	b	c
a			
b			
c	56		

$$\Rightarrow a^2 - c^2 = ?$$

- A) 12 B) 15 C) 18 D) 21 E) 27

9.

+	a	b	c
a		x	
b			
x			

x	a	b	x
a		y	
b			
x		7y	

$$\Rightarrow a^2 + b^2 = 85 \quad y = ?$$

- A) 9 B) 11 C) 13 D) 15 E) 17

10.

15	20	50	19
2	△	□	□
3	□	△	△
10	I	□	□
5	□	II	III

$$\Rightarrow I, II, III = ?$$

- A) △ □ □ B) □ △ ○ C) □ □ △
D) △ □ △ E) △ △ △

11.

+	a	b	c
a	c	32	
b		2c	
c			

$$\Rightarrow b - c + a = ?$$

- A) 0 B) 1 C) 2 D) 3 E) 4

12.

□	△	◊	◇	○
□		6	8	12
△			K	
◊			10	M
◇				12

$$\Rightarrow K = ?; M = ?$$

- A) 6; 2 B) 8; 6 C) 16; 8
D) 18; 0 E) 6; 15

YANITLAR / ANSWERS

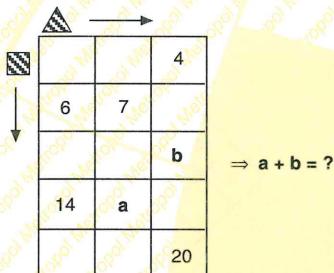
1	2	3	4	5	6	7	8	9	10	11	12
B	B	C	C	A	B	A	B	E	A	B	E

1.

	4	6	10
2	●	■	▲
3	■	★	△
5	▲	△	?

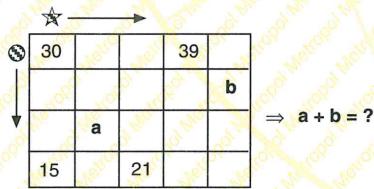
- A) 2 B) 3 C) 15 D) 30 E) 50

2.



- A) 20 B) 23 C) 27 D) 30 E) 32

3.



- A) 58 B) 60 C) 70 D) 78 E) 81

4.

3	6	8
12	●	■
3	▲	—
8	—	▲

$$\Rightarrow \text{●, } \text{▲, } \text{■} = ?, ?, ?$$

- A) 2,1,3 B) 2,0,4 C) 3,1,2 D) 4,2,0 E) 4,1,2

5.

2	3	5
7	▲	○
8	□	▲
9	△	○

$$\Rightarrow \triangle, \star, \circ = ?$$

- A) 2,3,4 B) 3,2,5 C) 7,3,2 D) 3,2,4 E) 7,2,3

6.

★	3	4	5
8	22		
10	A	28	
12		C	
16	38		B

$$\Rightarrow A + B + C = ?$$

- A) 97 B) 98 C) 99 D) 100 E) 101

7.

3	1	?
4	2	12
5	3	16

- A) 3 B) 8 C) 7 D) 5 E) 2

8.

7	6	2
5	2	9
4	8	?

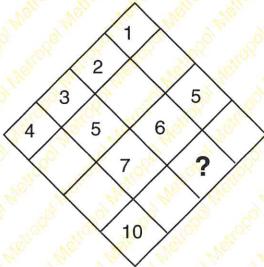
- A) 3 B) 8 C) 7 D) 5 E) 2

9.

9	6	5	7
3	6	9	9
15	1	4	7
6	9	8	?

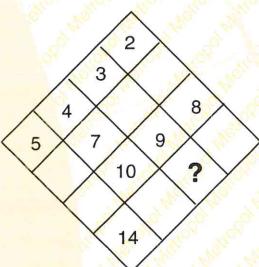
- A) 2 B) 3 C) 4 D) 5 E) 6

10.



- A) 6 B) 7 C) 8 D) 9 E) 10

11.



- A) 9 B) 11 C) 12 D) 13 E) 14

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12.

6	9	21
8	8	16
4	4	■

$$\Rightarrow \blacksquare = ?$$

- A) 2 B) 3 C) 4 D) 5 E) 8

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
E	C	B	E	E	D	B	D	C	C	C	E

BÖLÜM 07 CHAPTER

Bölüm / Chapter 7

SAYILAR
NUMBERS

Test 1

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakam göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} \text{KL} \\ \text{LM} \\ + \text{LM} \\ \hline \text{KLM} \end{array} \Rightarrow \text{K} + \text{L} + \text{M} = ?$$

- A) 10
- B) 11
- C) 12
- D) 13
- E) 14

$$\begin{array}{r} 9\text{KL} \\ - 5\text{L}7 \\ \hline 4\text{LK} \end{array} \Rightarrow \text{K} + \text{L} = ?$$

- A) 3
- B) 5
- C) 7
- D) 9
- E) 11

$$\begin{array}{r} \text{KL} \\ \times 4 \\ \hline 4\text{M} \end{array} \quad \begin{array}{r} 3\text{M} \\ - \text{LN} \\ \hline \text{KL} \end{array} \Rightarrow \text{N} = ?$$

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

Sayılar / Numbers

$$\begin{array}{r} \text{ABC} \\ \times 43 \\ \hline 37\text{C} \\ + \dots \dots \dots \\ \hline \dots \dots \dots \end{array} \Rightarrow \text{A} \times \text{B} \times \text{C} = ?$$

- A) 6
- B) 10
- C) 15
- D) 18
- E) 21

$$\begin{array}{r} \text{AB} \\ + \text{BB} \\ \hline 68 \end{array} \quad \begin{array}{r} \text{CB} \\ + \text{AD} \\ \hline 91 \end{array} \Rightarrow \text{C} = ?$$

- A) 5
- B) 6
- C) 7
- D) 8
- E) 9

$$\begin{array}{r} \text{A} | \text{B} \\ = 2 \\ \hline 1 \end{array} \quad \begin{array}{r} \text{B} | \text{C} \\ = 1 \\ \hline ? \end{array} \Rightarrow \begin{array}{r} \text{A} | 6 \\ = ? \\ \hline ? \end{array}$$

- A) 3
- B) 4
- C) 5
- D) 6
- E) 7

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7.
$$\begin{array}{r} \text{KM8} & \text{KL} \\ - \text{L7M} & - \text{MK} \\ \hline 1\ 7 & \text{LN} \end{array} \Rightarrow N = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

8.
$$\begin{array}{r} xyz \\ - zyx \\ \hline 29a \end{array} \Rightarrow a = ?$$

- A) 2
B) 4
C) 6
D) 7
E) 9

9.
$$\begin{array}{r} A5B3C \\ - A1B5C \\ \hline ????? \end{array}$$

- A) 3800
B) 3820
C) 3890
D) 3980
E) 4020

10.
$$\begin{array}{r} AB \\ BC \\ + CA \\ \hline 88 \end{array} \Rightarrow \max(A) = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

11.
$$\begin{array}{r} KL | 13 \\ \hline 8 \end{array} \quad \begin{array}{r} MN | 13 \\ \hline 12 \end{array} \quad \begin{array}{r} KL-MN | 13 \\ \hline ? \end{array}$$

- A) 5
B) 6
C) 7
D) 8
E) 9

12.
$$\begin{array}{r} KKK \\ + LLL \\ \hline 1665 \end{array} \quad \begin{array}{r} LLL \\ + MMM \\ \hline 1443 \end{array} \quad \begin{array}{r} KKK \\ - MMM \\ \hline ??? \end{array}$$

- A) 111
B) 222
C) 333
D) 444
E) 555

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	E	B	B	A	D	D	D	B	E	B

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$1. \quad \begin{array}{r} T \\ + N \\ \hline LL \end{array} \quad \begin{array}{r} LL \\ + LL \\ \hline MM \end{array} \Rightarrow T + N + L + M = ?$$

- A) 13
B) 14
C) 15
D) 16
E) 17

$$2. \quad \begin{array}{r} ab \\ \times c \\ \hline 144 \end{array} \quad \begin{array}{r} ab \\ \times d \\ \hline 252 \end{array} \quad \begin{array}{r} ab \\ \times cd \\ \hline ? \end{array}$$

- A) 1446
B) 1589
C) 1692
D) 1782
E) 1964

$$3. \quad \begin{array}{r} K \\ + L \\ \hline 9 \end{array} \quad \begin{array}{r} M \\ + 5 \\ \hline 12 \end{array} \quad \begin{array}{r} K \\ + 3 \\ \hline M \end{array} \Rightarrow \begin{array}{r} M \\ - L \\ \hline ? \end{array}$$

- A) 1
B) 2
C) 3
D) 4
E) 5

4.

$$\begin{array}{r} L \\ + 4 \\ \hline 6 \end{array} \quad \begin{array}{r} L \\ + M \\ \hline 11 \end{array} \quad \begin{array}{r} K \\ + 1 \\ \hline M \end{array} \Rightarrow \begin{array}{r} K \\ L \\ + M \\ ? \end{array}$$

- A) 19
B) 21
C) 25
D) 32
E) 35

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$$5. \quad \begin{array}{r} KK \\ + 77 \\ \hline LL \end{array} \quad \begin{array}{r} KL \\ + LK \\ \hline MM \end{array} \Rightarrow K \times L \times M = ?$$

- A) 36
B) 48
C) 56
D) 64
E) 72

$$6. \quad \begin{array}{r} MM \\ \times K \\ \hline KK \end{array} \quad \begin{array}{r} KK \\ - LL \\ \hline MM \end{array} \Rightarrow \begin{array}{r} LL \\ | MM \\ ? \end{array}$$

- A) K
B) L
C) M
D) LM
E) ML

7. $\frac{K \mid 7}{N} = \frac{K+5 \mid N+1}{M}$ $K > 9$
 $\frac{3}{1} = \frac{7}{M}$ $\Rightarrow M = ?$

- A) 0
B) 1
C) 2
D) 3
E) 4

8. $\begin{array}{r} KK \\ KL \\ LK \\ + LL \\ \hline 308 \end{array} \Rightarrow K+L = ?$

- A) 10
B) 12
C) 14
D) 16
E) 18

9. $\begin{array}{r} CD \\ \times DC \\ \hline E1E \\ + C21 \\ \hline CC2E \end{array} \Rightarrow C = ?$

- A) 3
B) 4
C) 5
D) 6
E) 7

10. $\frac{D}{2} - \frac{E}{14} + \frac{F}{2} - \frac{E}{2} \Rightarrow D = ?$

- A) 5
B) 6
C) 7
D) 8
E) 9

11. $\begin{array}{r} KL8 \\ + LKG \\ \hline 1004 \end{array} \quad \begin{array}{r} KL8 \\ - LK \\ \hline 404 \end{array} \Rightarrow \begin{array}{l} \times \quad KL \\ \hline ? \end{array}$

- A) 2430
B) 2340
C) 2130
D) 2040
E) 1986

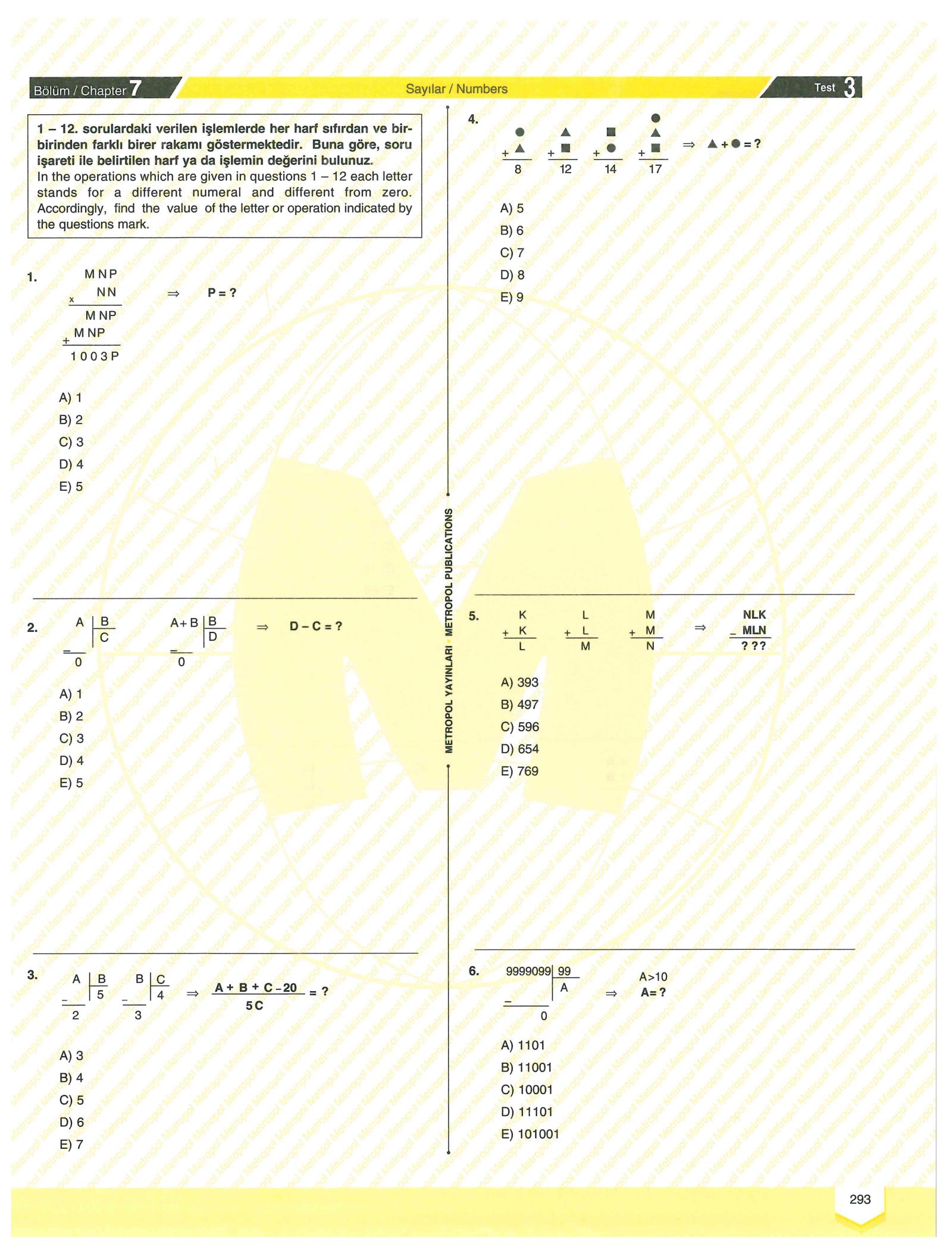
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12. $\begin{array}{r} KLM \\ \times 2K \\ \hline N.. \\ + 656 \\ \hline 7544 \end{array} \Rightarrow K+L+M+N = ?$

- A) 12
B) 14
C) 18
D) 20
E) 22


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	C	B	A	E	B	B	C	D	E	A	E



1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

1.

$$\begin{array}{r} \text{M N P} \\ \times \quad \text{NN} \\ \hline \text{M N P} \\ + \quad \text{M N P} \\ \hline 1003 \text{P} \end{array}$$

- A) 1
B) 2
C) 3
D) 4
E) 5

2.

$$\begin{array}{r} \begin{array}{c|cc} \text{A} & \text{B} \\ \hline \text{C} & \end{array} & \begin{array}{c|c} \text{A} + \text{B} & \text{B} \\ \hline \text{D} & \end{array} \\ \hline 0 & 0 \end{array} \Rightarrow \text{D} - \text{C} = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

3.

$$\begin{array}{r} \begin{array}{c|cc} \text{A} & \text{B} \\ \hline 5 & \end{array} & \begin{array}{c|cc} \text{B} & \text{C} \\ \hline 3 & \end{array} \\ \hline 2 & 3 \end{array} \Rightarrow \frac{\text{A} + \text{B} + \text{C} - 20}{5\text{C}} = ?$$

- A) 3
B) 4
C) 5
D) 6
E) 7

4.

$$\begin{array}{r} \begin{array}{c} \bullet \\ + \quad \triangle \\ \hline 8 \end{array} & \begin{array}{c} \triangle \\ + \quad \blacksquare \\ \hline 12 \end{array} & \begin{array}{c} \blacksquare \\ + \quad \bullet \\ \hline 14 \end{array} & \begin{array}{c} \bullet \\ + \quad \triangle \\ \hline 17 \end{array} \\ \hline \end{array} \Rightarrow \triangle + \bullet = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

5.

$$\begin{array}{r} \begin{array}{c} \text{K} \\ + \quad \text{K} \\ \hline \text{L} \end{array} & \begin{array}{c} \text{L} \\ + \quad \text{L} \\ \hline \text{M} \end{array} & \begin{array}{c} \text{M} \\ + \quad \text{M} \\ \hline \text{N} \end{array} \\ \hline \end{array} \Rightarrow \frac{\text{NLK}}{\text{MLN}} = ???$$

- A) 393
B) 497
C) 596
D) 654
E) 769

6.

$$\frac{9999099}{= \quad 0} \quad \begin{array}{c} 99 \\ | \quad \text{A} \end{array} \Rightarrow \begin{array}{l} \text{A} > 10 \\ \text{A} = ? \end{array}$$

- A) 1101
B) 11001
C) 10001
D) 11101
E) 101001

7. $\begin{array}{r} A \\ \pm B \\ \hline 30 \end{array}$ $\begin{array}{r} B \\ \pm C \\ \hline 38 \end{array}$ $\begin{array}{r} A \\ \pm C \\ \hline 36 \end{array}$ $\Rightarrow A; B; C > 10$

- A) 48
- B) 49
- C) 50
- D) 51
- E) 52

8. $\begin{array}{r} AB \\ BA \\ CD \\ DC \\ EF \\ + FE \\ \hline 231 \end{array} \Rightarrow A + B + C + D + E + F = ?$

- A) 20
- B) 21
- C) 22
- D) 23
- E) 24

9. $\begin{array}{r} \blacktriangle \bullet \\ \times \star \\ \hline 192 \end{array}$ $\begin{array}{r} \blacktriangle \bullet \\ \times \blacksquare \\ \hline 448 \end{array}$ $\begin{array}{r} \blacktriangle \bullet \\ \times \star \blacksquare \\ \hline ? \end{array}$

- A) 2154
- B) 2274
- C) 2285
- D) 2368
- E) 2438

10. $\begin{array}{r} K L K \\ + L K L \\ \hline 1 S S 1 \end{array} \Rightarrow S = ?$

- A) 1
- B) 2
- C) 3
- D) 4
- E) 5

11. $\begin{array}{r} K \\ + L \\ \hline M \end{array}$ $\begin{array}{r} K \\ - L \\ \hline M \end{array} \Rightarrow K \cdot L \cdot M = ?$

- A) 0
- B) 2
- C) 8
- D) 16
- E) 64

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12. $\begin{array}{r} K \\ + L \\ \hline N \end{array}$ $\begin{array}{r} NL \\ + LL \\ \hline 52 \end{array} \Rightarrow K \times L = ?$

- A) 3
- B) 4
- C) 5
- D) 6
- E) 7

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	A	C	D	A	E	E	B	D	B	A	A

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

1. $\begin{array}{r} \text{KL2} \\ + 454 \\ \hline 8K6 \end{array}$ $\begin{array}{r} \text{KL} \\ + L4 \\ \hline 122 \end{array}$ $\Rightarrow K \times L = ?$

- A) 24
- B) 30
- C) 36
- D) 42
- E) 48

2. $\begin{array}{r} \frac{A}{B} \\ = \\ 1 \end{array}$ $\begin{array}{r} \frac{B}{C} \\ = \\ 1 \end{array}$ $\Rightarrow \frac{\text{ABC}}{\text{CBA}} = ???$

- A) 123
- B) 153
- C) 198
- D) 219
- E) 235

3. $\begin{array}{r} \text{ABC} \\ \times 2 \\ \hline 990 \\ + 990 \\ \hline \dots \dots \end{array} \Rightarrow B = ?$

- A) 3
- B) 4
- C) 5
- D) 8
- E) 9

4. $\begin{array}{r} \text{A B} \\ \text{B A} \\ \text{A B} \\ + \text{B A} \\ \hline 154 \end{array} \Rightarrow \max(\text{AB}) = ?$

- A) 70
- B) 61
- C) 52
- D) 43
- E) 34

5. $\begin{array}{r} \text{AB} + \text{BC} + \text{CA} \\ \text{AA} + \text{BB} + \text{CC} \\ = ? \end{array}$

- A) 1
- B) 2
- C) 11
- D) 22
- E) 33

6. $\begin{array}{r} \text{ABA1} \\ - \text{A1ABA} \\ \hline 0396 \end{array} \Rightarrow \text{B} = ?$

- A) 3
- B) 4
- C) 5
- D) 6
- E) 7

7. $7 \ A \ 6 \ B \ C$

$$- \ 6 \ A \ 7 \ C \ B$$

$$\underline{9 \ 9 \ 1 \ 8}$$

$$B - C = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

8. $\begin{array}{r} KL \\ \times L \\ \hline 336 \end{array}$ $\begin{array}{r} MN \\ \times N \\ \hline 336 \end{array}$ K L M N $+$ $+ N$ $?$

- A) 16
B) 20
C) 23
D) 27
E) 29

9. $\frac{MLM}{LM} = 21 \Rightarrow L \times M = ?$

- A) 3
B) 5
C) 7
D) 9
E) 10

10. KL

$$\times LM$$

 KL

$$+ TK$$

 TTL

$$T = ?$$

- A) 2
B) 4
C) 6
D) 8
E) 9

11. $\frac{LL}{K} = KK$ $\frac{MM}{L} = KK$

$$\Rightarrow K+L+M = ?$$

- A) 14
B) 12
C) 10
D) 8
E) 6

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12. $\frac{KK}{+ LL} = \frac{KK}{- LL} \Rightarrow \frac{K}{L} ?$

- A) 6
B) 10
C) 16
D) 18
E) 24

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	C	E	B	A	C	B	C	E	D	A	B

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In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the questions mark.

$$\begin{array}{r} \text{KLM} \\ \text{LM} \\ + \text{M} \\ \hline 258 \end{array} \Rightarrow \text{K} + \text{L} + \text{M} = ?$$

- A) 16
B) 15
C) 14
D) 12
E) 10

$$\begin{array}{r} \text{KLM} \\ + \text{NRN} \\ \hline 723 \end{array} \quad \begin{array}{r} \text{KLM} \\ - \text{NRN} \\ \hline 441 \end{array} \Rightarrow \text{K} = ?$$

- A) 3
B) 5
C) 6
D) 7
E) 9

$$\begin{array}{r} \text{L} \\ + \text{L} \\ \hline \text{KM} \end{array} \quad \frac{\text{KM}}{\text{N}} = \text{L} \Rightarrow \text{N} = ?$$

- A) 2
B) 3
C) 4
D) 5
E) 6

$$\begin{array}{r} \text{LL} \\ + \text{MM} \\ \hline \text{N}2\text{N} \end{array} \quad \begin{array}{r} \text{L} \\ - \text{M} \\ \hline \text{N} \end{array} \Rightarrow \text{L} = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

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$$\begin{array}{r} \text{K} \\ + \text{L} \\ \hline \text{M} \end{array} \quad \begin{array}{r} \text{KLM} \\ - \text{MK} \\ \hline \text{ML} \end{array} \Rightarrow \text{M} = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

$$\begin{array}{r} \text{AAB} \\ \text{BAA} \\ + \text{ABA} \\ \hline 777 \end{array} \Rightarrow \max(\text{AxB}) = ?$$

- A) 3 B) 4 C) 5 D) 6 E) 7

7.
$$\frac{KL}{LK} + \frac{ML}{LK} = ?$$

- A) 2
B) 3
C) 4
D) 5
E) 6

8.
$$\frac{KK}{\dots} + \dots = K + L = ?$$

- A) 2
B) 3
C) 4
D) 5
E) 6

9.
$$\frac{KK}{LL} - \frac{MM}{LL} = K + L + M = ?$$

- A) 10
B) 12
C) 14
D) 16
E) 18

10.
$$\frac{K}{L} - \frac{K}{LM} = K + L + M = ?$$

- A) 16
B) 18
C) 20
D) 22
E) 24

11.
$$\frac{K}{\frac{L}{3}} - \frac{KL}{LM} = M = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

12.
$$\frac{KL}{L8} + \frac{K}{13} = K = ?$$

- A) 7
B) 6
C) 5
D) 4
E) 3

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	B	A	C	E	D	E	B	C	B	D	D

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$1. \frac{13KL}{5} = K6L \Rightarrow K + L = ?$$

- A) 2
- B) 5
- C) 7
- D) 9
- E) 11

$$2. \frac{KL}{6M} = \frac{K}{M} \Rightarrow M = ?$$

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

$$3. \begin{array}{r} AB \\ \times 34 \\ \hline KL0 \\ + 13N \\ \hline 1530 \end{array} \Rightarrow K + L + N = ?$$

- A) 10
- B) 11
- C) 12
- D) 13
- E) 14

$$4. \frac{24XY}{3} \mid Z \Rightarrow X + Y + Z = ?$$

- A) 12
- B) 13
- C) 14
- D) 15
- E) 16

$$5. \frac{A}{4} \mid \frac{B}{3} \quad \frac{A+116}{0} \mid \frac{B}{15} \Rightarrow B \geq 9 \Rightarrow B = ?$$

- A) 9
- B) 10
- C) 12
- D) 14
- E) 16

$$6. \begin{array}{r} XYZ \\ \times XY \\ \hline Z \end{array} \quad 2A + B = 23 \Rightarrow Z = ?$$

- A) 3
- B) 6
- C) 5
- D) 7
- E) 8

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7.
$$\begin{array}{c|ccccc} XY & | & 7 & & XY & | & C & & XY & | & 5 \\ \hline B & & & & B & & ? & & & & \\ \hline C & & & & & & & & & & \end{array}$$

- A) 0
B) 1
C) 2
D) 3
E) 4

8.
$$\begin{array}{c|ccccc} A & A & B & | & A & & \\ \hline X & & & & & & \\ \hline 8 & & & & & & \end{array} \Rightarrow \begin{array}{l} x \geq 10 \\ B + X = ? \end{array}$$

- A) 18
B) 19
C) 110
D) 118
E) 119

9.
$$\begin{array}{c|ccccc} 3 & A & B & | & 3 & A & \\ \hline \bullet & \bullet & \bullet & | & 1 & A & \\ \hline 3 & & & & & & \end{array} \Rightarrow \begin{array}{l} A \geq 0 \\ A + B = ? \end{array}$$

- A) 3
B) 4
C) 5
D) 6
E) 7

10.
$$\begin{array}{r} 335 \\ - 33 \\ \hline X \end{array} \Rightarrow \begin{array}{l} Y \geq 10 \\ X + Y = ? \end{array}$$

- A) 7
B) 9
C) 10
D) 12
E) 15

11.
$$\begin{array}{r} KK \\ + LL \\ \hline TT \end{array} \quad \begin{array}{r} MM \\ + NN \\ \hline TT \end{array} \quad \begin{array}{r} TT \\ + TT \\ \hline 110 \end{array} \Rightarrow (KxL) + (MxN) = ?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

12.
$$\frac{a5b9c}{6b3a2} \Rightarrow a + b + c = ?$$

 $\frac{22912}{22912}$

- A) 14
B) 8
C) 6
D) 5
E) 4

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
C	A	E	C	B	A	B	D	A	E	C	A

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the questions mark.

$$\begin{array}{r} \square \bullet \triangle \\ - \triangle \bullet \square \\ \hline \bullet \square \star \end{array} \Rightarrow \blacksquare = ?$$

- A) 9
B) 7
C) 5
D) 3
E) 1

$$\begin{array}{r} \triangle \triangle \\ \times \quad \square \quad \square \\ \hline 1 \triangle \bullet \\ + 1 \triangle 2 \\ \hline 1 \square 5 \bullet \end{array} \Rightarrow \triangle + \square + \bullet = ?$$

- A) 3
B) 6
C) 7
D) 9
E) 11

$$\begin{array}{r} AB4 \\ + BA \\ \hline C10 \end{array} \Rightarrow C = ?$$

- A) 3
B) 5
C) 6
D) 7
E) 9

4. $\frac{\square \square \square}{\square} + 55 = \square \square \square \Rightarrow \square \square = ?$

- A) 23
B) 46
C) 53
D) 61
E) 85

5. $\frac{K}{+ K \\ N} \quad \frac{K}{x K \\ L} \quad \frac{N}{x L \\ MR} \Rightarrow \frac{K + N + L}{R + M} = ?$

- A) 1
B) 2
C) 3
D) 4
E) 5

6. $\frac{K}{+ 2 \\ L} \quad \frac{L}{+ 1 \\ N} \quad \frac{N}{- 4 \\ M} \Rightarrow \frac{NKM}{- KLN \\ ???}$

- A) 123
B) 174
C) 258
D) 276
E) 308

7. $\begin{array}{r} \text{abb} \\ \text{abb} \\ + \text{abb} \\ \hline \text{bc2} \end{array} \Rightarrow \mathbf{a+b+c=?}$

- A) 4
B) 5
C) 6
D) 7
E) 8

8. $\begin{array}{r} \text{AA} \\ \text{AB} \\ \text{BA} \\ + \text{BB} \\ \hline 330 \end{array} \Rightarrow \mathbf{A+B=?}$

- A) 14
B) 15
C) 16
D) 17
E) 18

9. $\begin{array}{r} \text{AB} \\ \text{BC} \\ + \text{CA} \\ \hline 165 \end{array} \Rightarrow \mathbf{\max(ABC)=?}$

- A) 852
B) 865
C) 945
D) 951
E) 960

10. $\begin{array}{r} \text{KL} \\ \text{LM} \\ + \frac{\text{K}}{11\text{M}} \\ \hline \end{array} \Rightarrow \mathbf{\max(K \times L)=?}$

- A) 9
B) 16
C) 21
D) 24
E) 25

11. $\begin{array}{r} \text{A7B} \\ + \text{CCB} \\ \hline 60C \end{array} \Rightarrow \mathbf{A+B+C=?}$

- A) 8
B) 9
C) 10
D) 11
E) 12

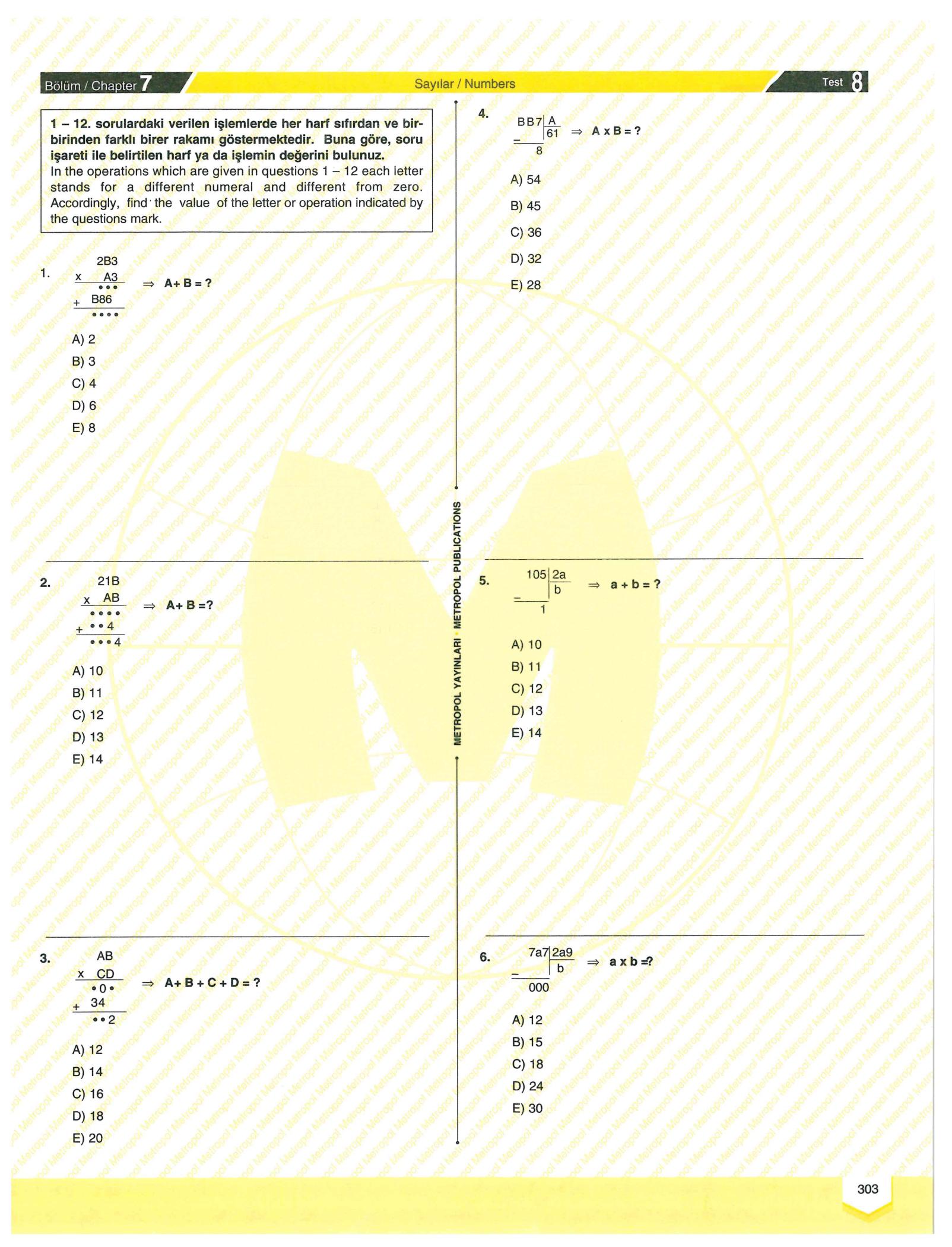
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12. $\begin{array}{r} \text{K} \\ \text{LM} \\ + \frac{\text{KML}}{4\text{KL}} \\ \hline \end{array} \Rightarrow \mathbf{L=?}$

- A) 3
B) 4
C) 5
D) 6
E) 7

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	D	D	D	B	D	E	B	D	D	D	C



7. $\frac{345}{7} \left| \begin{array}{c} xy \\ 13 \end{array} \right. \Rightarrow x + y = ?$

- A) 4
B) 5
C) 6
D) 7
E) 8

8. $\frac{73X}{4y5} \Rightarrow y - x = ?$

- A) 3
B) 5
C) 6
D) 7
E) 8

9. $\frac{KK}{+ LL} \quad \frac{KL}{+ LM} \quad \frac{MM}{+ ?K} \Rightarrow$

- A) 66
B) 67
C) 68
D) 69
E) 70

10. $\frac{K}{L} \quad \frac{L}{M} \quad \frac{K}{L} \quad \frac{K}{M} \quad \frac{K}{L} \quad \frac{K^2}{14} \Rightarrow K^2 = ?$

- A) 1
B) 4
C) 9
D) 16
E) 25

11. $\frac{KL}{+ K} \quad \frac{LK}{+ L} \quad \frac{KN}{+ LN} \quad \frac{84}{84} \Rightarrow (K + L) = ?$

- A) 7
B) 10
C) 12
D) 15
E) 18

12. $\frac{AAB}{- BAA} \quad 297 \Rightarrow A - B = ?$

- A) 1
B) 2
C) 3
D) 4
E) 5

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
D	B	C	B	A	A	E	C	C	D	A	C

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} \text{KKK} \\ \text{KKK} \\ + \text{LLL} \\ \hline 1221 \end{array} \quad \begin{array}{r} \text{KL} \\ - \text{LK} \\ \hline 9 \end{array} \Rightarrow \text{K} \times \text{L} = ?$$

- A) 6
- B) 9
- C) 12
- D) 15
- E) 18

$$\begin{array}{r} \text{K} \\ - \text{L} \\ \hline 3 \end{array} \quad \begin{array}{r} \text{L} \\ + 4 \\ \hline \text{M} \end{array} \quad \begin{array}{r} \text{M} \\ - 5 \\ \hline \text{N} \end{array} \Rightarrow \frac{\text{K}}{\text{N}} = ?$$

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

$$\begin{array}{r} \text{K} \\ + \text{M} \\ \hline \text{N} \end{array} \quad \begin{array}{r} \text{MM} \\ + \text{LL} \\ \hline \text{KK} \end{array} \Rightarrow \frac{\text{N}}{\text{L}} = ?$$

- A) K + M
- B) M – N
- C) K + K
- D) M + M
- E) M – K

$$\begin{array}{r} \text{K} \\ \times 6 \\ \hline \text{RK} \end{array} \quad \begin{array}{r} \text{M} \\ \times 3 \\ \hline \text{LM} \end{array} \Rightarrow \max(\text{R} + \text{M}) = ?$$

- A) 8
- B) 9
- C) 10
- D) 11
- E) 12

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$$\begin{array}{r} \text{K} \\ \times \text{K} \\ \hline \text{L} \end{array} \quad \begin{array}{r} \text{N} \\ \times \text{N} \\ \hline \text{M} \end{array} \quad \begin{array}{r} \text{L} \\ \times \text{M} \\ \hline \text{NT} \end{array} \Rightarrow \text{T} = ?$$

- A) 3
- B) 4
- C) 5
- D) 6
- E) 7

$$\begin{array}{r} 1aab \\ 1a \\ \hline 00ab \\ \underline{-a4} \\ \hline 0a \end{array} \Rightarrow a + b = ?$$

- A) 6
- B) 8
- C) 10
- D) 12
- E) 15

7.

$$\begin{array}{r} abc \\ \times 2d \\ \hline 940 \\ + 4e0 \\ \hline 5640 \end{array} \Rightarrow d + e = ?$$

- A) 2
B) 4
C) 7
D) 11
E) 13

8.

$$\begin{array}{r} KM \\ \times MK \\ \hline NN \\ + MK \\ \hline 15K \end{array} \Rightarrow N = ?$$

- A) 7
B) 6
C) 5
D) 4
E) 3

9.

$$\begin{array}{r} AB \\ \times 3 \\ \hline 3D \\ - 3D \\ \hline BC \\ = AB \end{array} \Rightarrow C = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

10.

$$\begin{array}{r} 1ab \\ \times c8 \\ \hline 992 \\ + \dots \\ \dots 12 \end{array} \Rightarrow a + b + c = ?$$

- A) 6
B) 7
C) 8
D) 9
E) 10

11.

$$\begin{array}{r} 3a0 \\ \times a03 \\ \hline \dots \\ \dots 1 \end{array} \Rightarrow a = ?$$

- A) 0
B) 1
C) 3
D) 7
E) 10

12.

$$\begin{array}{r} aay \\ \times y5 \\ \hline 560 \\ + yyt \\ \hline 2800 \end{array} \Rightarrow y + t = ?$$

- A) 2
B) 4
C) 6
D) 8
E) 10

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
C	C	D	B	D	B	D	A	D	D	B	C

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} \text{LK} \\ - \text{L} \\ \hline 21 \end{array} \quad \begin{array}{r} \text{KKL} \\ - \text{LLK} \\ \hline \text{MON} \end{array} \Rightarrow \text{NxM= ?}$$

- A) 9
B) 12
C) 18
D) 20
E) 24

$$\begin{array}{r} \text{abc} \\ - \text{cba} \\ \hline 495 \end{array} \quad \begin{array}{r} \text{ac} \\ + \text{ca} \\ \hline 77 \end{array} \Rightarrow \text{a = ?}$$

- A) 3
B) 4
C) 5
D) 6
E) 7

$$\begin{array}{r} \text{x0y001} \\ - \text{b} \\ \hline \text{a} \end{array} \quad \text{x0y} \Rightarrow \text{a + b = ?}$$

- A) 101
B) 1001
C) 10001
D) 1010
E) 10010

4. $\begin{array}{r} \text{A|B} \\ \hline \text{D+1} \end{array} \quad \begin{array}{r} \text{E|B} \\ \hline \text{C-1} \end{array} \Rightarrow \text{A-B-E-D = ?}$

- A) 2
B) 1
C) 2D + 1
D) 2B-C
E) 2B + 1

5. $\begin{array}{r} \text{K} \\ \text{L} \\ + \text{M} \\ \hline \text{N} \end{array} \Rightarrow \text{K+M-N+L = ?}$

- A) -2
B) -1
C) 0
D) 1
E) 2

6. $\begin{array}{r} \text{XYZ} \\ \times 3\text{A} \\ \hline \dots \\ 435 \\ \pm \text{XYZ} \\ \hline 19140 \end{array} \Rightarrow (\text{A}+\text{Z})-(\text{X}+\text{Y}) = ?$

- A) 1
B) 2
C) 3
D) 4
E) 5

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7.

$$\begin{array}{r} XYX \\ \times .7 \\ \hline .6 \\ + 5.5 \\ \hline 8925 \end{array}$$

- A) 7
B) 9
C) 11
D) 12
E) 15

8.

$$\frac{A}{8} = \frac{B}{7} = \frac{A}{4} \Rightarrow a + b = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 6

9.

$$\frac{A}{B} = \frac{B}{C} + \frac{D}{A} \Rightarrow D = ?$$

- A) A
B) B
C) C
D) B - C
E) A + C

10.

$$\begin{array}{r} 38. \\ \times .4 \\ \hline ...4 \\ + 8 \\ \hline ab12c \end{array} \Rightarrow a + b + c = ?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

11.

$$\frac{2A8}{3} \left| \begin{array}{r} B5 \\ 7 \end{array} \right. \Rightarrow A = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

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12.

$$\begin{array}{r} 346 \\ \times a8 \\ \hline b768 \\ + c46 \\ \hline \dots \end{array} \Rightarrow a + b + c = ?$$

- A) 3
B) 4
C) 5
D) 6
E) 7

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	D	B	B	C	B	A	C	C	A	A	D

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} 1. \quad \begin{array}{r} L \\ + L \\ \hline KM \end{array} \quad \begin{array}{r} KM \\ N \\ \hline = L \end{array} \Rightarrow N = ? \end{array}$$

A) 2
B) 3
C) 4
D) 5
E) 6

$$\begin{array}{r} 2. \quad \begin{array}{r} AB4 \\ - y \\ \hline AB \\ x \\ \hline \end{array} \Rightarrow \begin{array}{l} x \geq 10 \\ x + y = ? \end{array} \end{array}$$

A) 10
B) 11
C) 12
D) 13
E) 14

$$\begin{array}{r} 3. \quad \begin{array}{r} KL \\ + KL \\ \hline ML8 \end{array} \Rightarrow M + L = ? \end{array}$$

A) 13
B) 12
C) 10
D) 9
E) 7

$$\begin{array}{r} 4. \quad \begin{array}{r} KL \\ \times LK \\ \hline \dots \\ + \dots \\ \hline K45L \end{array} \quad \begin{array}{r} K \\ \times L \\ \hline L \end{array} \Rightarrow L = ? \end{array}$$

- A) 5
B) 6
C) 7
D) 8
E) 9

$$\begin{array}{r} 5. \quad \begin{array}{r} KL \\ + KL \\ \hline 1KK \end{array} \Rightarrow K + L = ? \end{array}$$

A) 10
B) 11
C) 12
D) 13
E) 14

$$\begin{array}{r} 6. \quad \begin{array}{r} KLK \\ \times KN \\ \hline \dots \\ + 504 \\ \hline 6048 \end{array} \Rightarrow N = ? \end{array}$$

- A) 1
B) 2
C) 3
D) 4
E) 5

7.
$$\begin{array}{r} K \\ + L \\ \hline M \end{array} \quad \begin{array}{r} M \\ + N \\ \hline KL \end{array} \Rightarrow N + K = ?$$

- A) 7
B) 8
C) 9
D) 10
E) 11

8.
$$\begin{array}{r} K \\ \times K \\ \hline LK \end{array} \quad \begin{array}{r} M \\ \times M \\ \hline NM \end{array} \quad \begin{array}{r} M \\ \times T \\ \hline LM \end{array} \Rightarrow T = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

9.
$$\begin{array}{r} XX \\ YY \\ + ZZ \\ \hline 154 \end{array} \Rightarrow X + Y = ?$$

- A) 6
B) 7
C) 8
D) 9
E) 10

10.
$$\begin{array}{r} ZYK \\ \times 7P \\ \hline \dots \\ + 4396 \\ \hline 45844 \end{array} \Rightarrow P = ?$$

- A) 2
B) 3
C) 4
D) 8
E) 9

11.
$$\begin{array}{r} K4 \\ \times K \\ \hline KL \end{array} \quad \begin{array}{r} KLK \\ + K \\ \hline KL2 \end{array} \Rightarrow L = ?$$

- A) 8
B) 6
C) 5
D) 4
E) 2

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12.
$$\begin{array}{r} KLM | 2M \\ - 2M \\ \hline 2R5 \\ - 22M \\ \hline 010 \end{array} \Rightarrow K + L + M + N + P + R = ?$$

- A) 23
B) 25
C) 26
D) 28
E) 30

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	E	E	D	C	D	D	D	B	B	D	E

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the questions mark.

1.

$$\begin{array}{r} \text{KLM} \\ \times \quad 319 \\ \hline \text{KLM} = ? \\ + 1554 \\ \hline \end{array}$$

- A) 234
B) 326
C) 438
D) 518
E) 634

2.

$$\begin{array}{r} \text{AAA} \\ \text{+ BBB} \\ \hline 1221 \end{array} \Rightarrow \max(\text{A}) = ?$$

- A) 10
B) 9
C) 8
D) 7
E) 6

3.

$$\begin{array}{r} \text{METRO} \\ \text{+ ORTEM} \\ \hline 66666 \end{array} \Rightarrow \text{M-E-T-R-O} = ?$$

- A) 120
B) 142
C) 160
D) 360
E) 720

4.

$$\begin{array}{r} \text{K} \\ - \frac{\text{M}}{\text{N}} \\ \hline \text{M} \\ - \frac{\text{N}}{\text{L}} \\ \hline \text{M} \\ + \frac{\text{M}}{14} \\ \hline \end{array} \Rightarrow \text{K} + \text{L} = ?$$

- A) 20
B) 18
C) 14
D) 12
E) 10

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5.

$$\begin{array}{r} 2 \bullet \blacktriangle \\ + \bullet \blacktriangle 5 \\ \hline 953 \end{array} \Rightarrow \bullet = ? ; \blacktriangle = ?$$

- A) 6 ; 7
B) 4 ; 8
C) 4 ; 6
D) 6 ; 8
E) 6 ; 9

6.

$$\begin{array}{r} \text{K KL} \\ + \text{KL} \\ \hline \text{MLM} \end{array} \Rightarrow \text{K} = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

7.

$$\begin{array}{r}
 1 \text{ K L} \\
 \times \quad M 7 \\
 \hline
 8 \text{ 6 8} \\
 + \dots \\
 \hline
 \text{L..8}
 \end{array}
 \Rightarrow \mathbf{K + L + M = ?}$$

- A) 9
B) 10
C) 11
D) 12
E) 13

8.

$$\begin{array}{r}
 \text{K L M} \\
 \times \quad 3 \text{ N} \\
 \hline
 \dots \\
 + 1 \text{ 7 5 2} \\
 \hline
 2 \text{ 1 0 2 4}
 \end{array}
 \Rightarrow \mathbf{N = ?}$$

- A) 2
B) 3
C) 4
D) 5
E) 6

9.

$$\begin{array}{r}
 3 \text{ 4 2} \\
 \times \quad \text{K L} \\
 \hline
 \dots 4 \\
 + 6 \text{ 8 4} \\
 \hline
 \dots \dots
 \end{array}
 \Rightarrow \mathbf{K + L = ?}$$

- A) 5
B) 6
C) 7
D) 8
E) 9

10.

$$\begin{array}{r}
 \text{A C} \\
 \text{C B} \\
 + \text{B A} \\
 \hline
 \text{A B C}
 \end{array}
 \Rightarrow \mathbf{A B + A C = ?}$$

- A) 37
B) 47
C) 59
D) 89
E) 99

11.

$$\begin{array}{r}
 \text{A B C} \\
 \times \quad 4 \text{ D} \\
 \hline
 \dots \dots \dots \\
 + 9 \text{ 2 4} \\
 \hline
 1 \text{ 0 3 9 5}
 \end{array}
 \Rightarrow \mathbf{D = ?}$$

- A) 6
B) 5
C) 4
D) 3
E) 2

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12.

$$\begin{array}{r}
 \text{A C B} \\
 \times \quad \text{A 1} \\
 \hline
 \text{A C B} \\
 + 5 \text{ A 8} \\
 \hline
 5 \text{ 5 B B}
 \end{array}
 \Rightarrow \mathbf{B = ?}$$

- A) 1
B) 2
C) 3
D) 4
E) 5

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
D	B	A	C	D	D	A	E	E	A	B	D

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$$\begin{array}{r} A1B \\ - B8 \\ \hline 6C4 \end{array} \Rightarrow A + B + C = ?$$

- A) 16
B) 17
C) 18
D) 19
E) 20

$$\begin{array}{r} 8A4B7 \\ - 7B8A4 \\ \hline 14553 \end{array} \Rightarrow A - B = ?$$

- A) 2
B) 3
C) 4
D) 5
E) 6

$$\begin{array}{r} ABC - CBA \\ - AC - CA \\ \hline \end{array} = ?$$

- A) 9
B) 10
C) 11
D) 33
E) 99

$$\begin{array}{r} ABB \\ - CD \\ \hline 26 \\ 24B \\ - D16 \\ \hline 030 \end{array}$$

- A) 466
B) 577
C) 788
D) 899
E) 966

$$\begin{array}{r} ■ 6 ■ ▲ \\ ■ ■ - 23 ▲ \\ - 06 \\ - 6 \\ \hline 0 ■ \\ - ■ \\ \hline 0 \end{array} \Rightarrow ■ = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

$$\begin{array}{r} AAB \\ \times BC \\ - D44 \\ + AAB \\ \hline 3094 \end{array} \Rightarrow A = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

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7.

$$\begin{array}{r} 5A \\ \times BC \\ \hline .7 \\ + ..5 \\ \hline DE07 \end{array}$$

$$\Rightarrow D+E=?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

8.

$$\begin{array}{r} ABC \\ + BEF \\ \hline 698 \end{array}$$

$$\begin{array}{r} ABC \\ - BEF \\ \hline 326 \end{array} \Rightarrow (ABC) = ?$$

- A) 510
B) 511
C) 512
D) 513
E) 514

9.

$$\begin{array}{r} 52K \\ \times L2 \\ \hline ...4 \\ + \\ 2...3. \end{array}$$

$$\Rightarrow K+L=?$$

- A) 7
B) 8
C) 9
D) 10
E) 11

10.

$$\begin{array}{r} \triangle \circ \\ + \square \star \\ \hline 35 \end{array} \quad \begin{array}{r} \square \star \\ + \blacksquare \blacktriangle \\ \hline 58 \end{array} \Rightarrow \begin{array}{r} \blacksquare \blacktriangle \\ - \triangle \circ \\ \hline ? \end{array}$$

- A) 17
B) 21
C) 23
D) 25
E) 26

11.

$$\begin{array}{r} ABC \\ ABC \\ + ABC \\ \hline DEFG \end{array}$$

$$\begin{array}{r} D E F G | 4 \\ \hline 384 \end{array} \Rightarrow A+B+C=?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

12.

$$\begin{array}{r} KLK \\ \times LK \\ \hline M KM \\ + KLK \\ \hline ABC9 \end{array}$$

$$\Rightarrow A+B+C=?$$

- A) 9
B) 10
C) 11
D) 12
E) 13

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
B	D	C	E	D	B	D	C	E	C	B	B

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} 1 \text{K}5 \\ \times 1\text{S} \\ \hline \text{E} 50 \\ + 1 \text{K}5 \\ \hline \text{S} 100 \end{array} \Rightarrow \text{K} = ?$$

- A) 3
B) 4
C) 6
D) 7
E) 8

$$\begin{array}{r} \text{KLM} \\ \times 3\text{N} \\ \hline \text{SMB} \\ + 549 \\ \hline \text{TBB} 2 \end{array} \Rightarrow \text{T} + \text{L} + \text{N} = ?$$

- A) 12
B) 16
C) 18
D) 21
E) 22

$$\begin{array}{r} \text{KLK} \\ - \text{KL} \\ \hline 564 \end{array} \Rightarrow \text{K} + \text{L} = ?$$

- A) 7
B) 8
C) 9
D) 11
E) 13

$$\begin{array}{r} \text{KLM} \\ \text{LMK} \\ + \text{MKL} \\ \hline 666 \end{array} \quad \begin{array}{r} \text{KL} \\ - \text{LK} \\ \hline 9 \end{array} \quad \begin{array}{r} \text{KM} \\ - \text{MK} \\ \hline 18 \end{array} \Rightarrow \text{K} = ?$$

- A) 2
B) 3
C) 4
D) 5
E) 6

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$$\begin{array}{r} \text{K} \\ + 2 \\ \hline \text{M} \end{array} \quad \begin{array}{r} \text{M} \\ - 3 \\ \hline \text{L} \end{array} \quad \begin{array}{r} \text{L} \\ + 4 \\ \hline \text{N} \end{array} \Rightarrow \begin{array}{r} \text{N MK} \\ - \text{L KN} \\ \hline \text{? ? ?} \end{array}$$

- A) 415
B) 416
C) 417
D) 418
E) 419

$$\begin{array}{r} \text{K} \\ + \text{K} \\ \hline \text{L} \end{array} \quad \begin{array}{r} \text{K} \\ \times \text{L} \\ \hline \text{MN} \end{array} \quad \begin{array}{r} \text{R} \\ + \text{R} \\ \hline \text{N} \end{array} \quad \begin{array}{r} \text{R} \\ \times \text{N} \\ \hline \text{KT} \end{array} \Rightarrow \text{T} + \text{N} = ?$$

- A) 9
B) 10
C) 11
D) 12
E) 13

7.
$$\begin{array}{r} \text{KLM} \\ + \text{ABC} \\ \hline 1524 \end{array} \quad \begin{array}{r} \text{KLM} \\ - \text{ABC} \\ \hline 226 \end{array} \Rightarrow \text{K} + \text{L} + \text{M} = ?$$

- A) 20
B) 18
C) 16
D) 14
E) 12

8.
$$\begin{array}{r} \text{KLM} \\ \cdots \\ - \cdots \\ \hline 0 \cdots \\ = 36 \\ \hline 5 \end{array} \Rightarrow \text{K} + \text{L} + \text{M} = ?$$

- A) 10
B) 11
C) 12
D) 13
E) 14

9.
$$\begin{array}{r} \blacksquare \blacktriangle \bullet \star \\ - \blacksquare \star \\ \hline 0 \ 3 \ \bullet \\ = 3 \ 0 \\ \hline 0 \ \bullet \end{array} \Rightarrow \text{N} = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

10.
$$\begin{array}{r} \text{KLM} \\ + \text{LKM} \\ \hline 5 \ 6 \ \text{L} \end{array} \Rightarrow \text{K} + \text{L} = ?$$

- A) 4
B) 5
C) 6
D) 7
E) 8

11.
$$\begin{array}{r} \text{KLM} \\ \times \text{LM} \\ \hline \text{PLM} \\ + \text{LMO} \\ \hline 3 \ 1 \ \text{LM} \end{array} \Rightarrow \text{K} + (\text{L} \cdot \text{M}) = ?$$

- A) 12
B) 11
C) 10
D) 9
E) 8

12.
$$\begin{array}{r} \text{KLM} \\ \times \text{K6} \\ \hline \text{MMM} \\ + \text{KLM} \\ \hline \text{SP6M} \end{array} \Rightarrow \text{S} + \text{P} = ?$$

- A) 3
B) 4
C) 5
D) 6
E) 7

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1	2	3	4	5	6	7	8	9	10	11	12
D	C	B	B	C	B	A	B	B	B	B	C

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} AB \\ - BC \\ \hline 132 \end{array} \Rightarrow A + B + C = ?$$

- A) 19
B) 18
C) 17
D) 15
E) 13

$$\begin{array}{r} 83 \\ \times AB \\ \hline \dots \dots \\ \hline CB31 \end{array} \Rightarrow A + B + C = ?$$

- A) 12
B) 13
C) 14
D) 15
E) 16

$$\begin{array}{r} X|Y \\ - N \\ \hline N \end{array} \quad \begin{array}{r} X+N|Z \\ - N \\ \hline \end{array} \Rightarrow Z = ?$$

- A) $X - N$
B) $X + 2$
C) $Y + 1$
D) $Y + N$
E) $X + Y + 1$

4.

$$\begin{array}{r} AB \\ + BA \\ \hline CC \end{array} \quad \begin{array}{r} AA \\ + CC \\ \hline 154 \end{array} \quad \begin{array}{r} CB \\ - BC \\ \hline 54 \end{array} \Rightarrow \begin{array}{l} A \\ A \\ C \end{array}$$

- A) 17
B) 18
C) 19
D) 20
E) 21

$$\begin{array}{r} 4AB \\ \hline AB \\ \hline 13 \end{array} \Rightarrow A + B = ?$$

- A) 15
B) 13
C) 10
D) 7
E) 6

$$\begin{array}{r} AB \\ \times C3 \\ \hline \dots \dots \\ \hline 12 \cdot 7 \end{array} \Rightarrow 2A + B + C = ?$$

- A) 20
B) 19
C) 18
D) 17
E) 16

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7. $\frac{X}{Y} = \frac{7}{4}, \frac{Y}{Z} = \frac{-4}{V}, \frac{Z}{V} = ? \Rightarrow X - V = ?$

- A) 14
B) 10
C) 8
D) 7
E) 6

8. $\frac{276}{C} \left| \begin{array}{c} AB \\ 18 \\ \hline \end{array} \right. \Rightarrow A + B + C = ?$

- A) 8
B) 10
C) 12
D) 18
E) 20

9. $\frac{ABC}{CC0} + \frac{DBC}{CC0} \Rightarrow \max(A+B+C+D) = ?$

- A) 11
B) 12
C) 13
D) 15
E) 16

10. $\frac{A B}{\begin{array}{r} x \cdot 7 \\ 1 C \cdot \\ + 9 A \\ \hline \end{array}} \Rightarrow A + B + C = ?$

- A) 10
B) 11
C) 12
D) 13
E) 14

11. $\frac{KL}{MM0} + \frac{LK}{MM0} + \frac{LL}{MM0} + \frac{M}{L} \Rightarrow KLM = ?$

- A) 134
B) 143
C) 314
D) 341
E) 431

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12. $\frac{K}{24} \left| \begin{array}{c} L \\ M \\ N \\ \hline \end{array} \right. \Rightarrow K + L + M + N = ?$

- A) 21
B) 22
C) 23
D) 24
E) 25

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
A	E	C	D	D	D	A	C	E	B	E	C

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretisi ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the questions mark.

$$\begin{array}{r} \text{KLK} \\ + 1\text{KL} \\ \hline \text{L32} \end{array} \Rightarrow \text{K} = ?$$

- A) 3
B) 4
C) 5
D) 6
E) 7

$$\begin{array}{r} \text{KLM} \\ - \text{MLK} \\ \hline \text{LP2} \end{array} \Rightarrow \text{P} = ?$$

- A) 0
B) 3
C) 5
D) 7
E) 9

$$\begin{array}{r} \text{KL} \\ \text{LM} \\ + \text{MN} \\ \hline \text{1MN} \end{array} \quad \begin{array}{r} \text{LM} \\ + \text{ML} \\ \hline ? \end{array}$$

- A) 119
B) 109
C) 110
D) 99
E) 90

$$\begin{array}{r} \text{AA} \\ \times \text{A} \\ \hline \text{BAC} \end{array} \quad \begin{array}{r} \text{AC} \\ \times \text{A} \\ \hline \text{BCA} \end{array} \Rightarrow \text{B} = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

$$\begin{array}{r} \text{KK} \\ \times \text{K} \\ \hline \text{LL} \end{array} \quad \begin{array}{r} \text{LL} \\ \times \text{K} \\ \hline \text{MM} \end{array} \quad \begin{array}{r} \text{MM} \\ + \text{LL} \\ \hline ? \end{array}$$

- A) 154
B) 132
C) 121
D) 110
E) 33

$$\begin{array}{r} \text{K} \\ + \text{L} \\ \hline \text{MN} \end{array} \quad \begin{array}{r} \text{N} \\ + \text{K} \\ \hline \text{L} \end{array} \quad \begin{array}{r} \text{LK} \\ - \text{KL} \\ \hline ? \end{array}$$

- A) 45
B) 36
C) 27
D) 18
E) 9

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7.

$$\begin{array}{r} \text{KK} \\ - \text{LL} \\ \hline \text{MM} \end{array} \quad \begin{array}{r} \text{KK} \\ + \text{MM} \\ \hline 198 \end{array} \Rightarrow \text{K} = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

8.

$$\begin{array}{r} \text{KLM} \\ \text{MLK} \\ + \text{LKM} \\ \hline 1\text{K}6\text{K} \end{array} \Rightarrow \text{K} = ?$$

- A) 3
B) 4
C) 5
D) 7
E) 8

9.

$$\begin{array}{r} \text{KK} \\ \times \text{LL} \\ \hline \dots \\ + \dots \\ \hline 4235 \end{array} \Rightarrow \text{K} + \text{L} = ?$$

- A) 10
B) 12
C) 14
D) 15
E) 16

10.

$$\begin{array}{r} \text{KL} \\ \text{LM} \\ + \text{MK} \\ \hline 165 \end{array} \quad \begin{array}{r} \text{LL} \\ \text{MM} \\ + \text{MK} \\ \hline 121 \end{array} \Rightarrow \text{K} = ?$$

- A) 10
B) 8
C) 6
D) 4
E) 2

11.

$$\begin{array}{r} \text{KL} \\ \times \text{L} \\ \hline \text{ML} \end{array} \quad \begin{array}{r} \text{KN} \\ \times \text{N} \\ \hline \text{PN} \end{array} \Rightarrow \text{P} + \text{M} = ?$$

- A) 12
B) 13
C) 16
D) 17
E) 19

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12.

$$\begin{array}{r} \text{KK} \\ \times \text{K} \\ \hline \text{LL} \end{array} \quad \begin{array}{r} \text{KK} \\ \times \text{L} \\ \hline \text{MM} \end{array} \Rightarrow \frac{\text{MLM}}{\text{K}} = ?$$

- A) 242
B) 282
C) 424
D) 484
E) 848


YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12
C	E	C	D	B	E	E	D	B	D	C	C

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

$$\begin{array}{r} \text{KLK} \\ + \text{K} \\ \hline \text{N00} \end{array}$$

- A) 2
B) 3
C) 4
D) 5
E) 6

$$\begin{array}{r} \text{KL} \\ + \text{LK} \\ \hline 99 \end{array} \quad \begin{array}{r} \text{KL} \\ - \text{LK} \\ \hline 9 \end{array} \Rightarrow \text{K} \times \text{L} = ?$$

- A) 8
B) 9
C) 14
D) 18
E) 20

$$\frac{\text{LM}}{\text{K}} = \text{K} \quad \frac{\text{MK}}{\text{L}} = \text{K} \Rightarrow \text{K} + \text{L} + \text{M} = ?$$

- A) 10
B) 12
C) 14
D) 16
E) 18

$$\begin{array}{r} \text{LL} \\ \times \text{M} \\ \hline \text{LL} \end{array} \quad \begin{array}{r} \text{KL} \\ \times 2\text{M} \\ \hline \text{KL} \\ + \dots \\ \hline 903 \end{array} \Rightarrow \text{K} = ?$$

- A) 1
B) 2
C) 3
D) 4
E) 5

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$$\frac{17\text{KK}}{4} = \text{KLM} \Rightarrow \text{L} + \text{M} = ?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

$$\begin{array}{r} \text{NN} \\ \times \text{N} \\ \hline 44 \end{array} \quad \begin{array}{r} \text{K6M} \\ - \text{NK6} \\ \hline \text{NNN} \end{array} \Rightarrow \text{K} + \text{M} = ?$$

- A) 8
B) 10
C) 12
D) 14
E) 16

7.

$$\begin{array}{r} KK \\ \times LL \\ \hline \dots \\ + \dots \\ \hline L178 \end{array}$$

- A) 6
B) 8
C) 9
D) 10
E) 11

8.

$$\begin{array}{r} K \\ \times L \\ \hline + 1 \\ \hline L \\ + 1 \\ \hline M \\ + M \\ \hline N \\ \times M \\ \hline N \end{array} \Rightarrow L + M = ?$$

- A) 3
B) 4
C) 5
D) 6
E) 7

9.

$$\begin{array}{r} KN \\ \times M \\ \hline KN \\ - L \\ \hline M \\ - LK \\ \hline N \end{array} \Rightarrow N = ?$$

- A) 5
B) 6
C) 7
D) 8
E) 9

10.

$$\begin{array}{r} M \\ \times N \\ \hline M \\ + MN \\ \hline 54 \end{array} \Rightarrow L \times M = ?$$

- A) 15
B) 12
C) 9
D) 6
E) 3

11.

$$\begin{array}{r} KLM \\ \times KM \\ \hline 6LM \\ + KLM \\ \hline K87M \end{array} \Rightarrow K + L + M = ?$$

- A) 8
B) 9
C) 10
D) 11
E) 12

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12.

$$\begin{array}{r} KLM \\ + ML \\ \hline 555 \\ - M \\ \hline 1 \end{array} \Rightarrow K \times L = ?$$

- A) 11
B) 12
C) 13
D) 14
E) 15

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
D	E	E	D	B	C	E	C	E	D	A	E

1 – 12. sorulardaki verilen işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Buna göre, soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In the operations which are given in questions 1 – 12 each letter stands for a different numeral and different from zero. Accordingly, find the value of the letter or operation indicated by the question mark.

1.

$$\begin{array}{r} \begin{array}{c} A \\ A \\ A \end{array} \\ \times \begin{array}{c} 4 \\ 4 \\ 4 \end{array} \\ \hline \begin{array}{c} 1 \\ 4 \\ 7 \\ 8 \\ 5 \\ 2 \end{array} \end{array} \Rightarrow B = ?$$

- A) 2
- B) 4
- C) 6
- D) 7
- E) 8

2.

$$\begin{array}{r} \begin{array}{c} 4 \\ 8 \\ X \\ Y \end{array} \\ - \quad \begin{array}{c} Z \\ 8 \\ 0 \\ 2 \end{array} \\ \hline \quad \quad \quad 3 \end{array} \Rightarrow X + Y + Z = ?$$

- A) 12
- B) 14
- C) 15
- D) 17
- E) 18

3.

$$\begin{array}{r} \begin{array}{c} AB \\ CD \end{array} \\ - \quad \begin{array}{c} A \\ 7 \end{array} \\ \hline \quad \quad \quad 9 \end{array} \Rightarrow C + D = ?$$

- A) 7
- B) 8
- C) 9
- D) 10
- E) 11

4.

$$\begin{array}{r} \begin{array}{c} 2 \\ A \\ B \end{array} \\ - \quad \begin{array}{c} C \\ 5 \\ 3 \end{array} \\ \hline \quad \quad \quad 2 \end{array} \Rightarrow \begin{array}{l} A > B \\ A + B + C = ? \end{array}$$

- A) 9
- B) 12
- C) 18
- D) 24
- E) 28

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5.

$$\begin{array}{r} \begin{array}{c} K \\ L \\ M \end{array} \\ - \quad \begin{array}{c} M \\ L \\ K \end{array} \\ \hline \quad \quad \quad T \\ R \\ 4 \end{array} \Rightarrow T + R = ?$$

- A) 14
- B) 13
- C) 12
- D) 11
- E) 10

6.

$$\begin{array}{r} \begin{array}{c} X \\ 3 \\ Y \end{array} \\ - \quad \begin{array}{c} 1 \\ 1 \\ \bullet \\ \bullet \\ \bullet \end{array} \\ \hline \quad \quad \quad 5 \\ 8 \\ 7 \\ Y \end{array} \Rightarrow X + Y = ?$$

- A) 9
- B) 7
- C) 6
- D) 5
- E) 3

7. $\begin{array}{r} 8 A 3 \\ - 5 B 7 \\ \hline A 5 6 \end{array} \Rightarrow A + B = ?$

- A) 6
B) 8
C) 12
D) 15
E) 21

8. $\begin{array}{r} A B C \\ \times 3 D \\ \hline \bullet \bullet \bullet \\ + 3 7 8 \\ \hline 4 6 6 2 \end{array} \Rightarrow D = ?$

- A) 3
B) 4
C) 5
D) 6
E) 7

9. $\begin{array}{r} AA \\ BB \\ + CC \\ \hline 154 \end{array} \quad \begin{array}{r} BB \\ + AA \\ \hline CC \end{array} \Rightarrow C = ?$

- A) 3
B) 4
C) 5
D) 6
E) 7

10. $\begin{array}{r} A B \\ \times 8 C \\ \hline 1 9 4 \\ \times 7 7 6 \\ \hline \bullet \bullet \bullet \end{array} \Rightarrow A + B + C = ?$

- A) 14
B) 16
C) 18
D) 20
E) 22

11. $\begin{array}{r} \bullet \bullet \bullet \\ \times 3 4 5 \\ \hline \boxed{\bullet \bullet \bullet} \\ \times 1 5 3 6 \\ \hline \bullet \bullet \bullet \bullet \end{array} \Rightarrow ?$

- A) 1048
B) 1688
C) 1958
D) 2048
E) 2118

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12. $\begin{array}{r} A B B \\ + A A \\ \hline 8 6 5 \end{array} \Rightarrow 3 \cdot A - 2 \cdot B = ?$

- A) 5
B) 7
C) 9
D) 11
E) 13

 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12
E	A	C	D	A	A	B	E	E	C	D	A

BÖLÜM 08

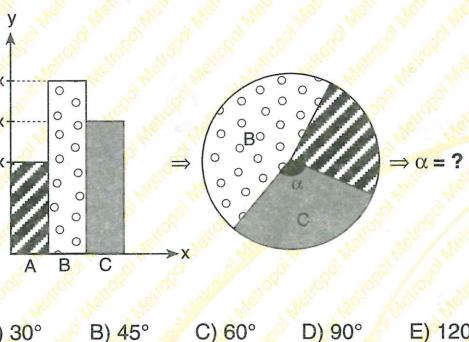
CHAPTER

Bölüm / Chapter 8

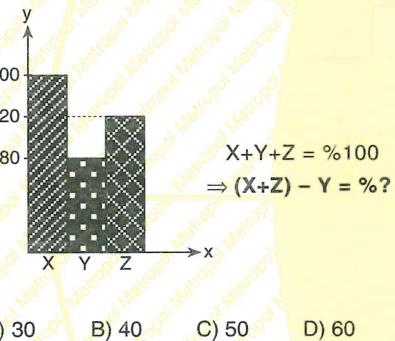
GRAFİKLER GRAPHS

Test 1

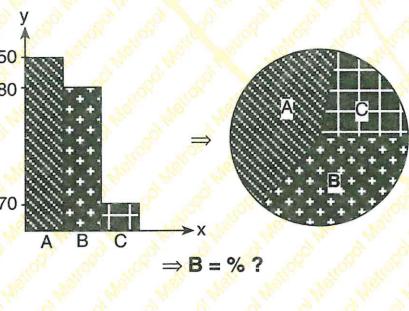
1.



2.

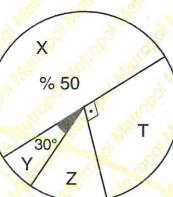


3.



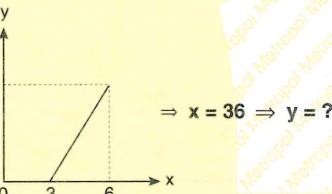
Grafikler / Graphs

4.



X	Y	Z	T
A) 6k	2k	k	3k
B) 6k	2k	k	4k
C) 8k	k	2k	3k
D) 8k	k	2k	5k
E) 6k	k	2k	3k

5.



- A) 42 B) 43 C) 44 D) 45 E) 46

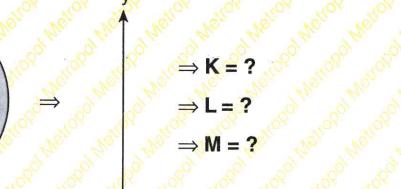
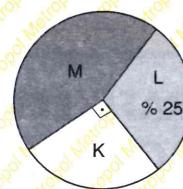
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6.

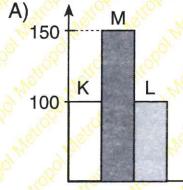


x°	y°	z°	t°
A) 36°	72°	108°	144°
B) 30°	60°	120°	150°
C) 45°	90°	90°	135°
D) 60°	75°	105°	120°
E) 30°	60°	90°	180°

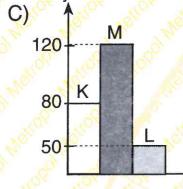
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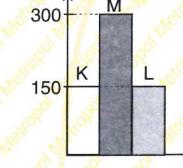
A)



C)



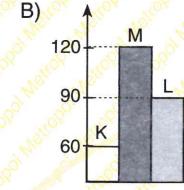
E)



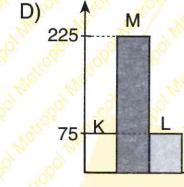
D)

B)

B)



D)



E)



A)



C)



B)



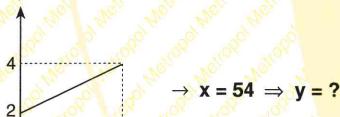
D)



E)



8.



A)

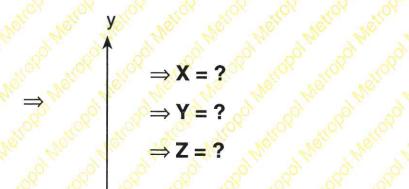
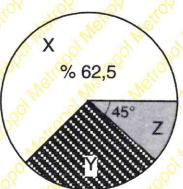
B)

C)

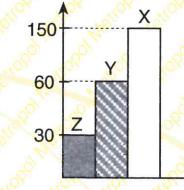
D)

E)

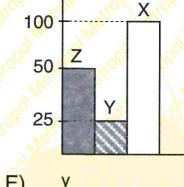
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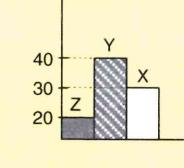
A)



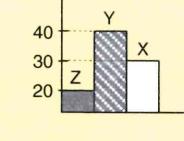
D)



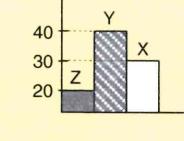
E)



C)



B)

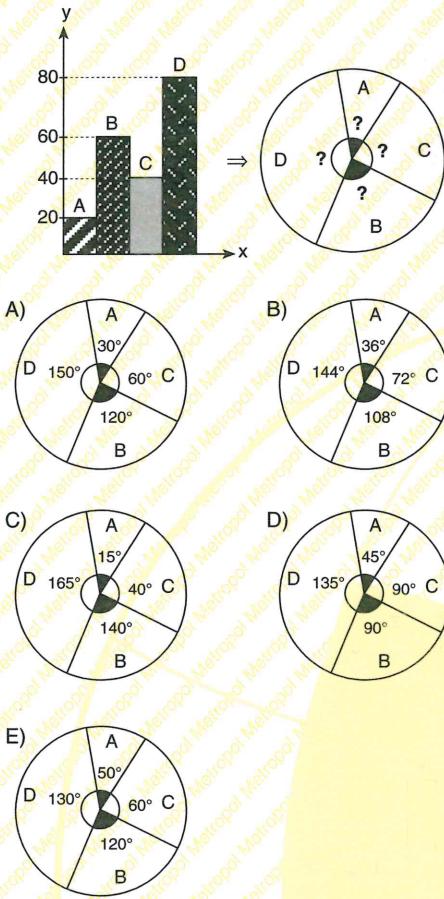


A)

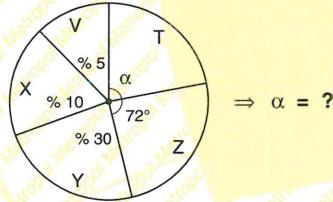
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
E	D	B	E	C	A	E	B	A

1.

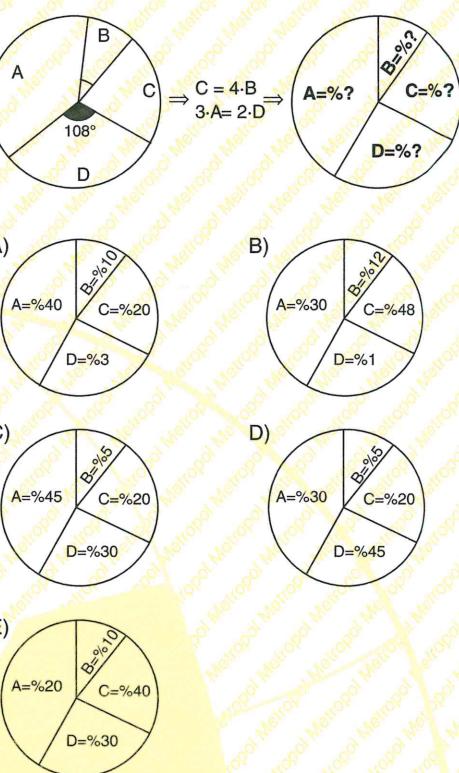


2.



- A) 108
B) 114
C) 120
D) 126
E) 132

3.



4.

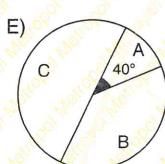
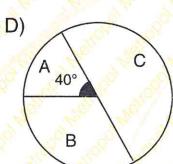
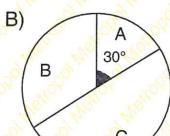
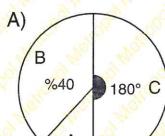
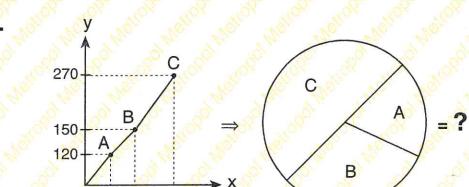


$$\begin{aligned} K &= ?m & N &= ?m \\ \Rightarrow L &= ?m & P &= ?m \\ M &= ?m & R &= ?m \end{aligned}$$

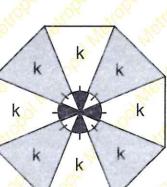
	K	L	M	N	P	R
A)	5m	3m	m	5m	2m	6m
B)	4m	2m	2m	5m	m	8m
C)	5m	3m	2m	5m	m	6m
D)	4m	3m	4m	3m	3m	6m
E)	5m	4m	2m	2m	m	8m

Bölüm / Chapter 8

5.



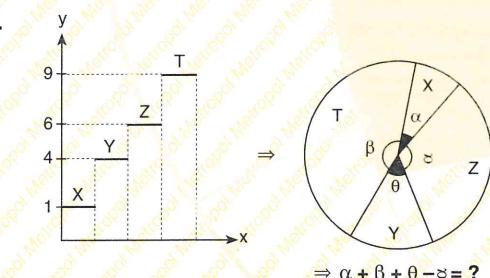
7.



$$\begin{aligned} X &= 2k \\ Y &= 3k \\ Z &= k \\ T &= 4k \end{aligned}$$

?

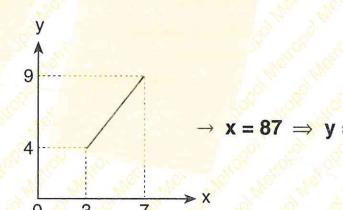
6.



- A) 36
B) 72
C) 108
D) 144
E) 162

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8.

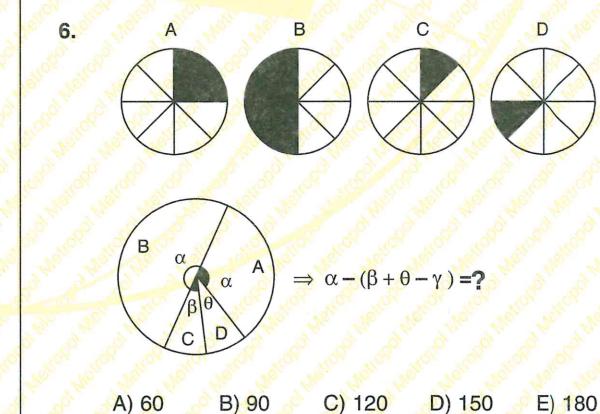
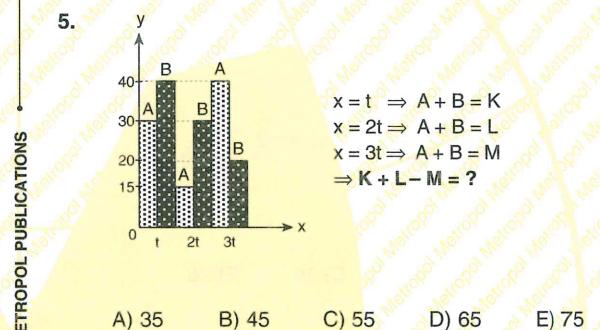
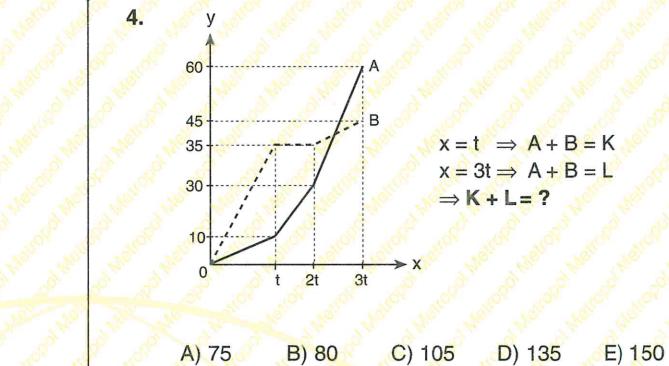
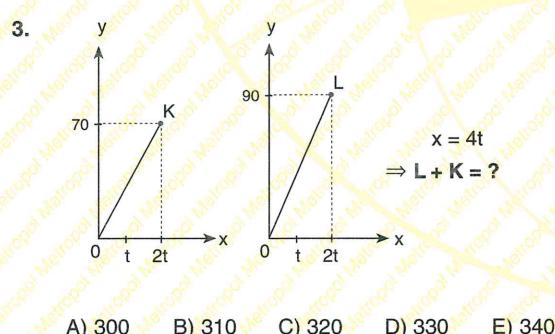
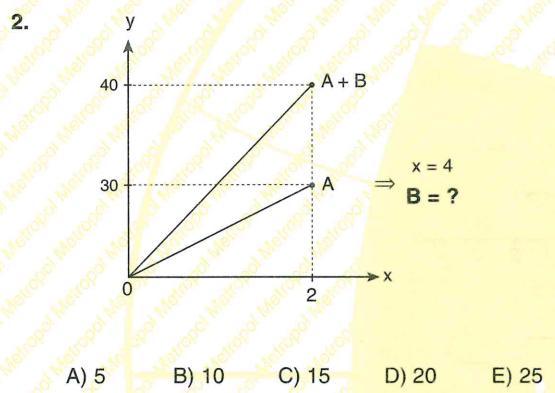
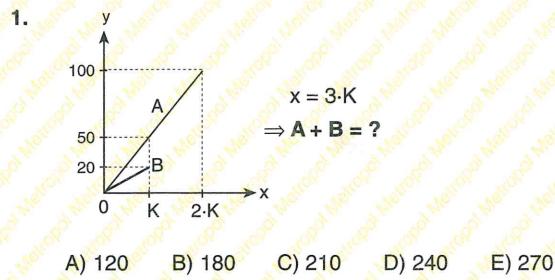


$$\rightarrow x = 87 \Rightarrow y = ?$$

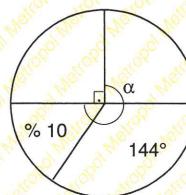
- A) 107 B) 108 C) 109 D) 110 E) 111

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1	2	3	4	5	6	7	8
B	D	E	C	C	D	D	C



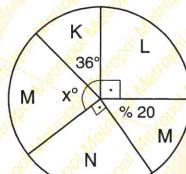
7.



$$\Rightarrow \alpha = ?$$

- A) 60 B) 75 C) 90 D) 120 E) 150

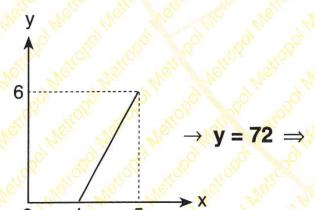
8.



$$\Rightarrow x = ?$$

- A) 56 B) 64 C) 72 D) 84 E) 96

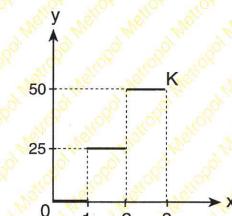
9.



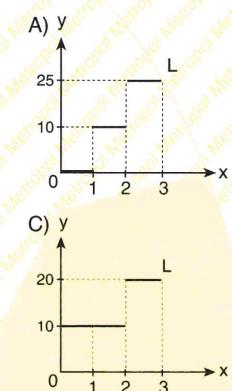
$$\rightarrow y = 72 \Rightarrow x = ?$$

- A) 48 B) 49 C) 50 D) 51 E) 52

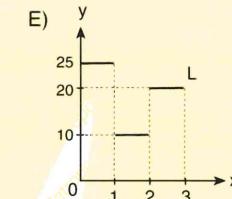
10.



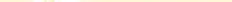
$$K-L$$



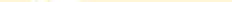
$$L = ?$$



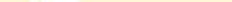
$$E)$$



$$D)$$



$$C)$$



$$B)$$

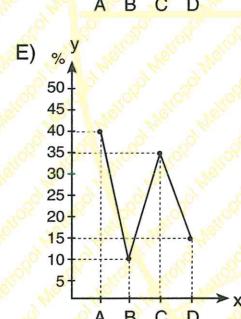
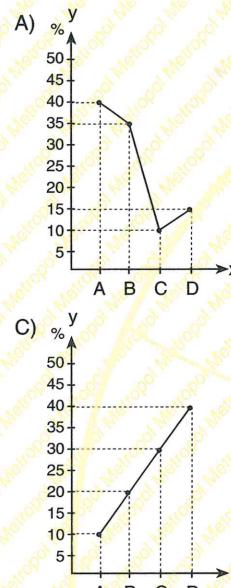
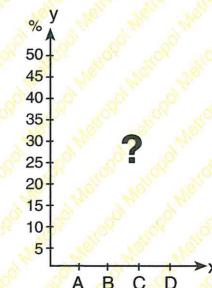
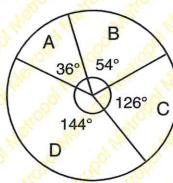


$$A)$$

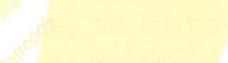
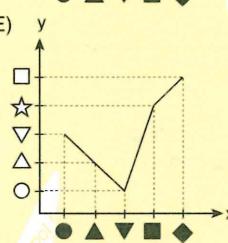
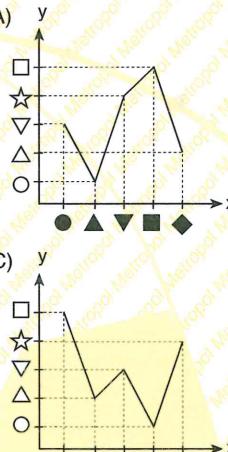
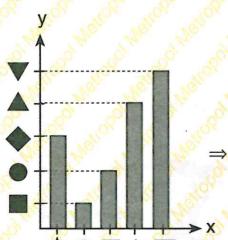


1	2	3	4	5	6	7	8	9	10
C	D	C	E	C	E	C	C	B	E

1.

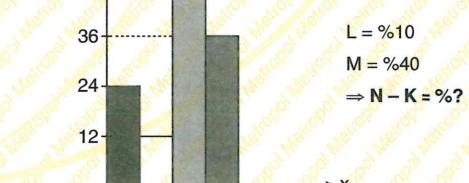


2.



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3.



A)

5

B)

10

C)

15

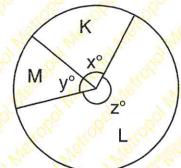
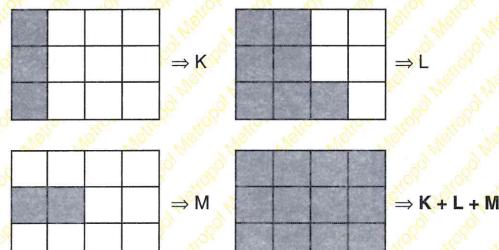
D)

20

E)

25

4.



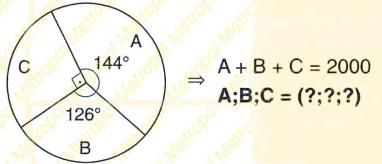
$$\Rightarrow x^\circ = ?$$

$$\Rightarrow y^\circ = ?$$

$$\Rightarrow z^\circ = ?$$

- | | x° | y° | z° |
|----|-----------|-----------|-----------|
| A) | 90° | 60° | 150° |
| B) | 108° | 126° | 126° |
| C) | 90° | 210° | 70° |
| D) | 150° | 90° | 60° |
| E) | 90° | 60° | 210° |

5.

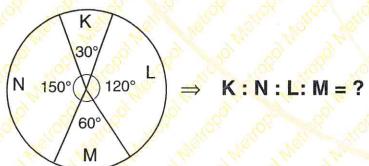


$$\Rightarrow A + B + C = 2000$$

$$A;B;C = (?;?;?)$$

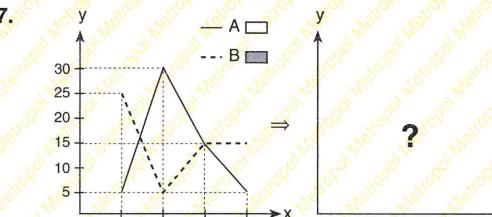
- A) (900, 700, 400)
B) (1250, 500; 250)
C) (800; 700; 500)
D) (1250; 250; 500)
E) (800; 450; 750)

6.

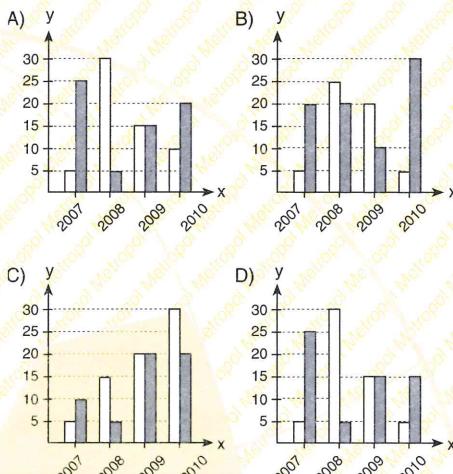


- A) 2; 3; 6; 1
B) 1; 2; 4; 5
C) 2; 4; 5; 1
D) 1; 5; 4; 2
E) 3; 2; 5; 4

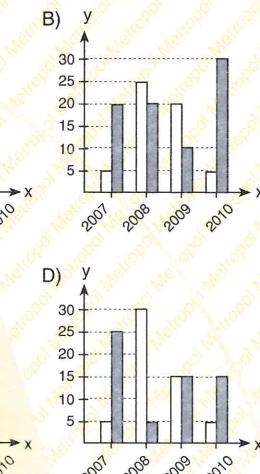
7.



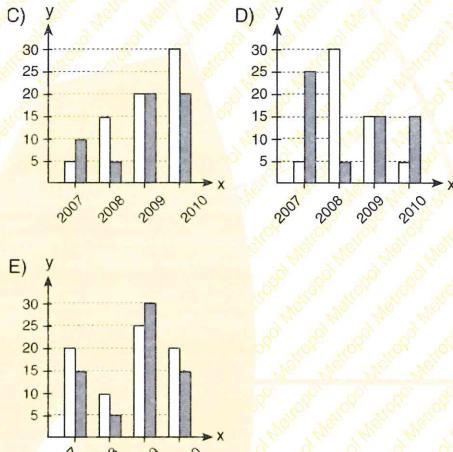
A)



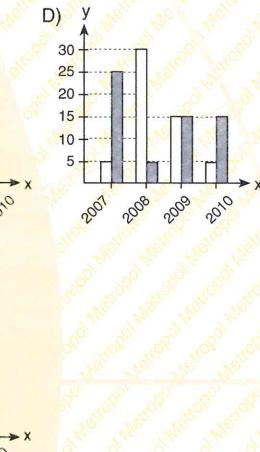
B)



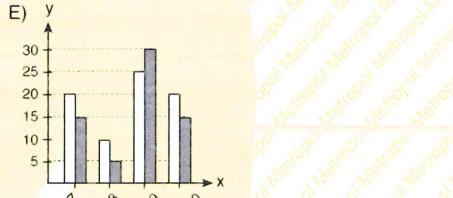
C)



D)



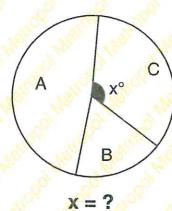
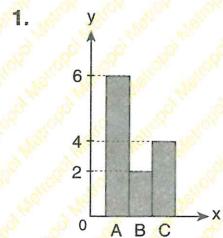
E)



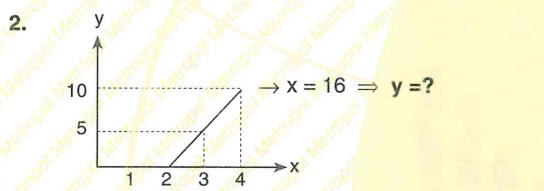
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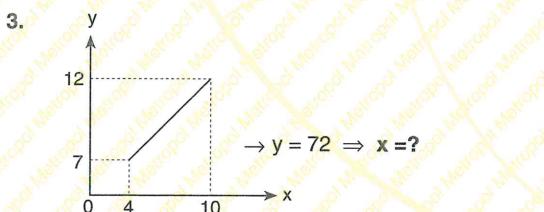
1	2	3	4	5	6	7
D	C	B	E	C	D	D



- A) 30 B) 60 C) 90 D) 120 E) 130

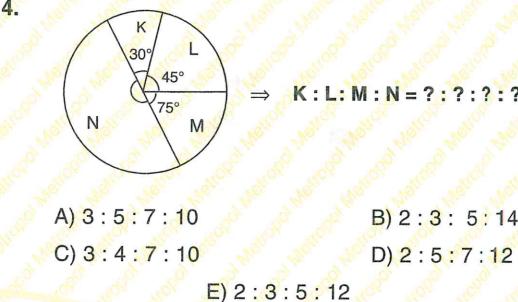


- A) 40 B) 50 C) 60 D) 70 E) 80

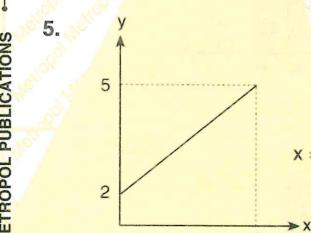


- A) 78 B) 79 C) 80 D) 81 E) 82

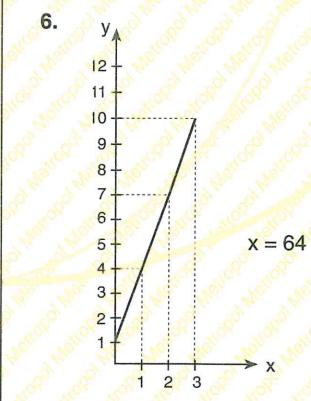
METROPOL YAYINLARI



- A) 3 : 5 : 7 : 10 B) 2 : 3 : 5 : 14
C) 3 : 4 : 7 : 10 D) 2 : 5 : 7 : 12
E) 2 : 3 : 5 : 12

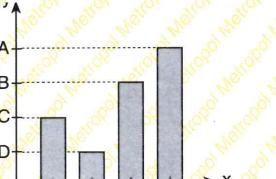


- A) 9 B) 11 C) 13 D) 15 E) 17

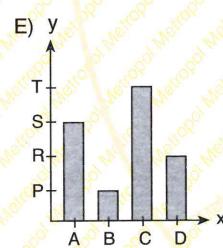
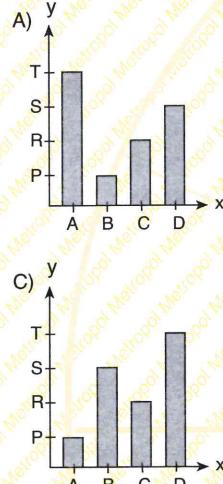
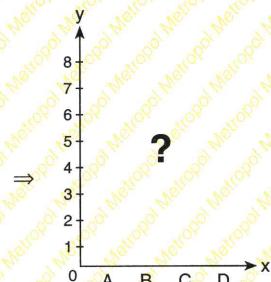
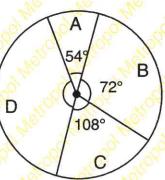
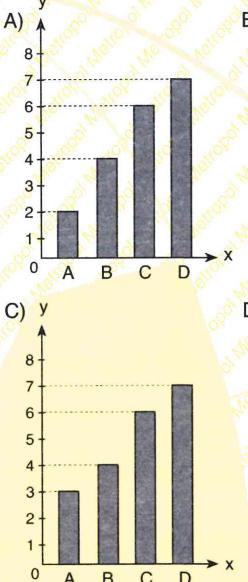
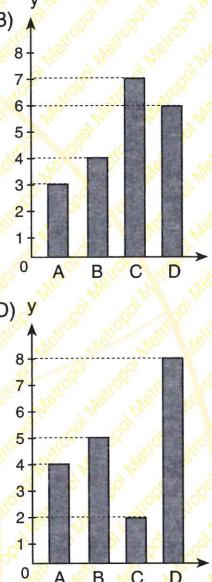
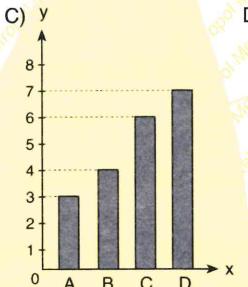
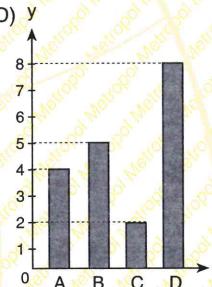
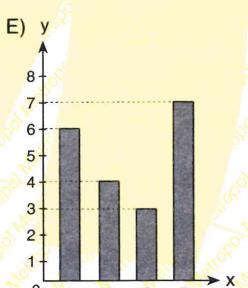


- A) 190 B) 191 C) 192 D) 193 E) 194

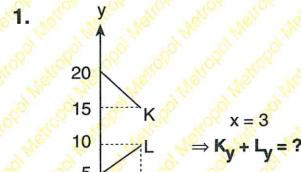
- 7.** I. $N_1(P,C)$
 $N_2(R,D)$
 $N_3(S,B)$
 $N_4(T,A)$



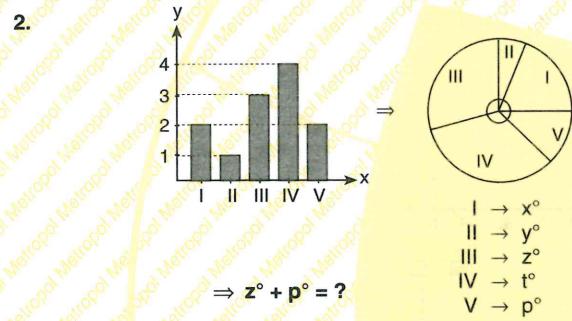
- II.** $N_1(A,S)$
 $N_2(B,T)$
 $N_3(C,R)$
 $N_4(D,P)$

**8.****A)****B)****C)****D)****E)****YANITLAR / ANSWERS**

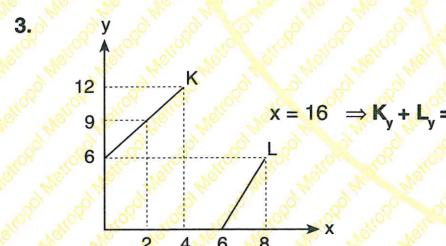
1	2	3	4	5	6	7	8
D	D	E	B	B	D	B	C



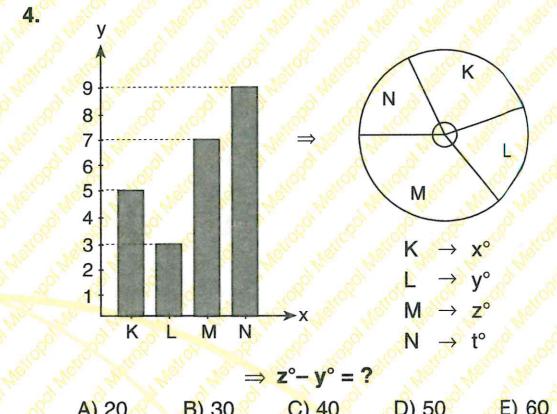
- A) 10 B) 15 C) 20 D) 25 E) 30



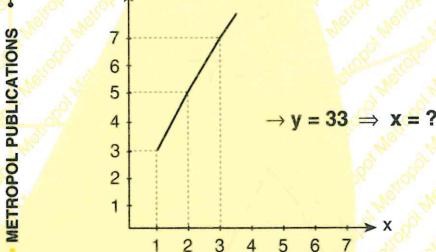
- A) 120° B) 135° C) 150° D) 180° E) 210°



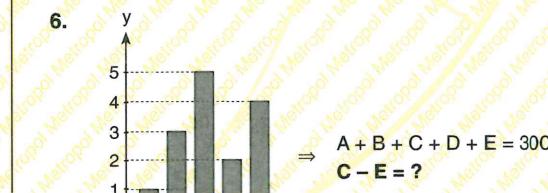
- A) 52 B) 54 C) 56 D) 58 E) 60



- A) 20 B) 30 C) 40 D) 50 E) 60

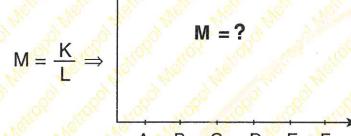
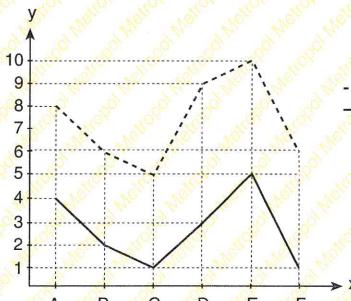


- A) 12 B) 14 C) 16 D) 18 E) 20



- A) 10 B) 20 C) 30 D) 50 E) 70

7.



8.

K	△	□	○	□	□
L	○	○	△	□	□
M	△	△	□	□	△
N	○	□	○	△	○

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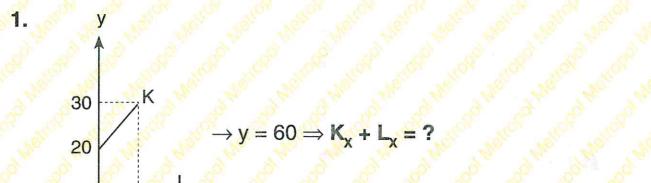
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?

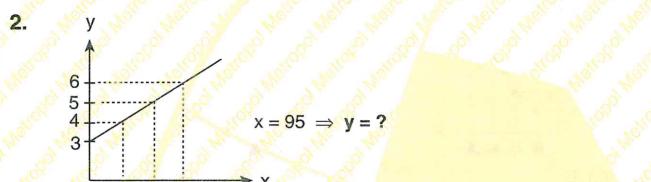
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?

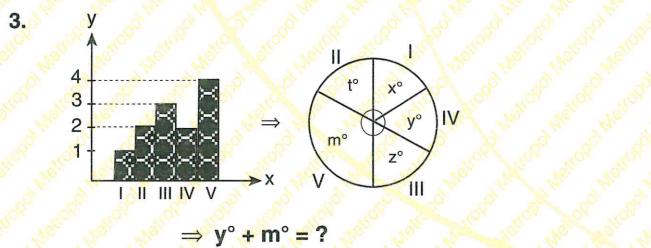
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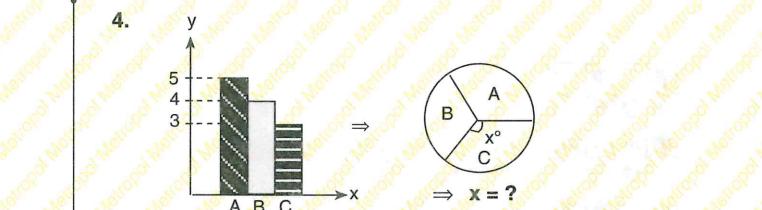
- A) 3 B) 4 C) 5 D) 6 E) 7



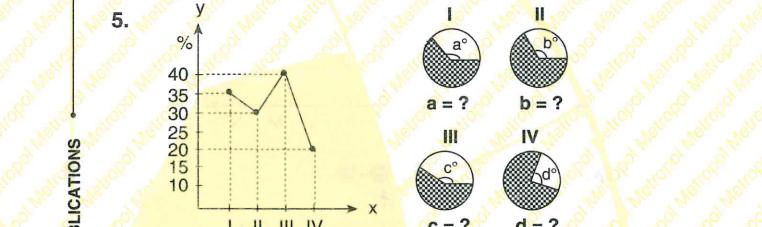
- A) 97 B) 98 C) 99 D) 100 E) 101



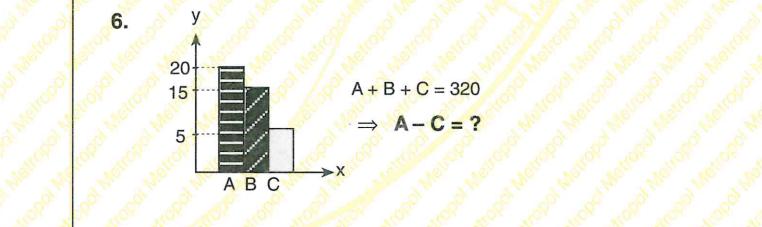
- A) 120 B) 140 C) 160 D) 180 E) 210



- A) 90 B) 110 C) 120 D) 150 E) 170



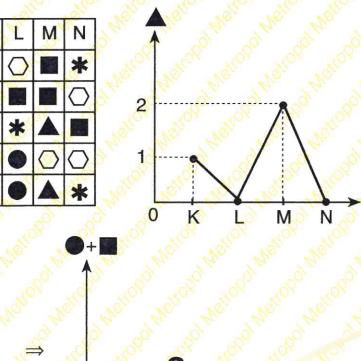
- | | | | |
|-----|-----|-----|----|
| a | b | c | d |
| 60 | 80 | 100 | 50 |
| 60 | 100 | 120 | 40 |
| 90 | 108 | 120 | 72 |
| 126 | 108 | 144 | 72 |
| 126 | 120 | 144 | 50 |



- A) 100 B) 120 C) 140 D) 160 E) 180

7.

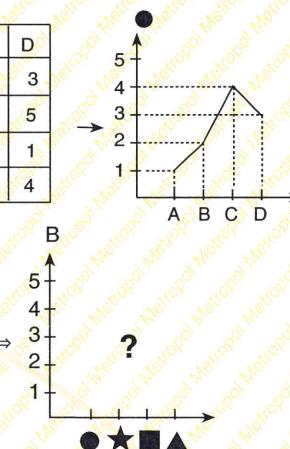
K	L	M	N
● ○	○ □	□ ■	* ■
▲ ■	■ ▲	▲ ■	■ ▲
■ *	* ▲	▲ ■	■ ▲
* ●	○ ○	○ ○	○ ○
○ ○	● ●	▲ ▲	* *



- A) B) C) D) E)

8.

A	B	C	D
● ○	1 2	4 3	
★ ■	3 2	1 5	
■ □	4 5	3 1	
▲ ▲	2 4	2 4	



- A) B) C) D) E)

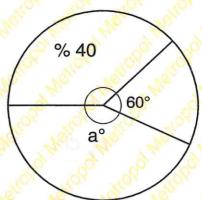
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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
B	B	D	A	D	B	E	D

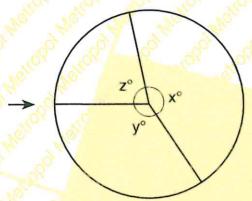
1. $\Rightarrow a^\circ = ?$



- A) 150° B) 152° C) 154° D) 156° E) 158°

2.

	x	y	z
I.	%35	%40	%25

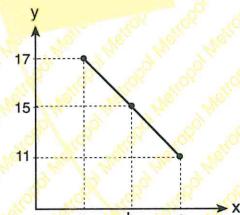


$\Rightarrow x^\circ = ? ; y^\circ = ? ; z^\circ = ?$

- | | x° | y° | z° |
|----|-------------|-------------|-------------|
| A) | 106° | 164° | 90° |
| B) | 126° | 154° | 80° |
| C) | 126° | 124° | 110° |
| D) | 106° | 144° | 110° |
| E) | 126° | 144° | 90° |

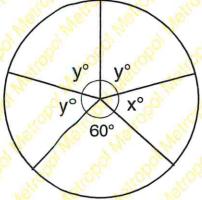
3. $a + b + c = 516$

$\Rightarrow a - b + c = ?$



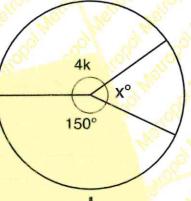
- A) 156 B) 157 C) 158 D) 159 E) 160

4. $x = 3y \Rightarrow x^\circ = ?$



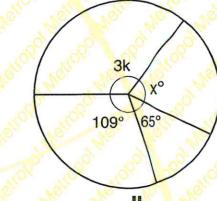
- A) 144 B) 147 C) 150 D) 153 E) 156

5.



I. $\Rightarrow x = ?$

- A) 113° B) 114° C) 115° D) 116° E) 117°



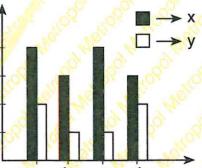
II. $\Rightarrow x = ?$

- A) 113° B) 114° C) 115° D) 116° E) 117°

6. $x - y = k$

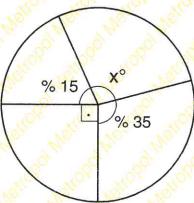
$a + b + c + d = 304 \Rightarrow$

$(a + b) - (c + d) = ?$



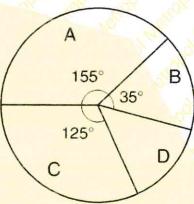
- A) 70 B) 72 C) 74 D) 76 E) 78

$$7. \Rightarrow x^\circ = ?$$



- A) 90 B) 92 C) 94 D) 96 E) 98

$$8. \Rightarrow A:B:C:D = ?$$



- A) 31 : 7 : 25 : 9 B) 7 : 25 : 9 : 31
 C) 25 : 7 : 31 : 9 D) 25 : 7 : 9 : 31
 E) 11 : 31 : 9 : 25

E) 11 : 31 : 9 : 25

The figure consists of two separate coordinate planes, each with a horizontal axis labeled with points a_1, a_2, a_3, a_4, a_5 and a vertical axis.

Graph on the left:

Point	Value
a_1	65
a_2	60
a_3	70
a_4	50
a_5	55
X	55

Graph on the right:

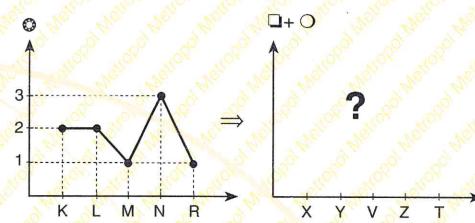
Point	Value
a_1	105
a_2	115
a_3	100
a_4	120
a_5	110
Y	110

$$\Rightarrow Xa_3 - Ya_5 + Xa_1 - Ya_2 + Xa_4 - Ya_3 = ?$$

- A) -160 B) -150 C) -140 D) -130 E) -120

10.

K	●	○	●	□	○
L	□	●	□	●	□
M	○	□	●	○	□
N	●	○	□	●	●
R	○	○	●	○	□



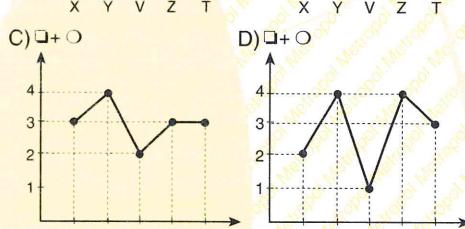
- The figure consists of two side-by-side graphs, labeled A and B. Both graphs have "Melrose" on the vertical axis and "Metropia" on the horizontal axis. The vertical axis has tick marks at 1, 2, 3, and 4. The horizontal axis has tick marks at 1, 2, 3, 4, and 5.

Graph A: Shows a piecewise linear function. It starts at (1, 2), goes to (2, 3), then to (3, 4). From (3, 4), it goes down to (4, 2) and then down to (5, 1).

Melrose	Metropia
2	1
3	2
4	3
1	4

Graph B: Shows a piecewise linear function. It starts at (1, 3), goes down to (2, 2), then up to (3, 4). From (3, 4), it goes down to (4, 3) and then up to (5, 4).

Melrose	Metropia
3	1
2	2
4	3
1	4



-

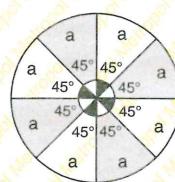
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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9	10
D	E	A	C	B	D	A	A	C	E

1.



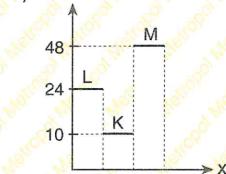
$$K+L+M=8a$$

$$K=a$$

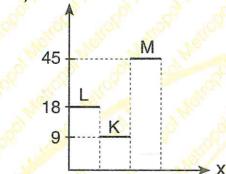
$$L=2a$$

?

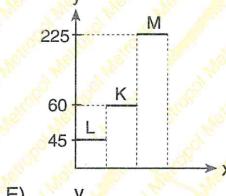
A)



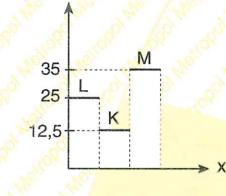
B)



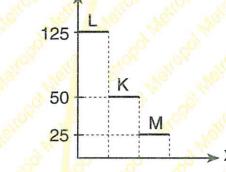
C)



D)



E)



3.

$$y = 20$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

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$$y = 10$$

$$y = 10$$

$$y = 10$$

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$$y = 10$$

$$y = 10$$

$$y = 10$$

$$y = 10$$

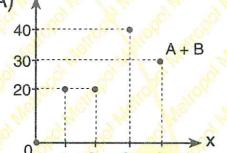
$$y = 10$$

$$y = 10$$

$$y = 10$$

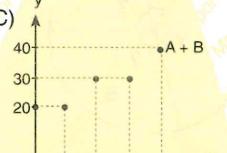
$$y = 10$$

A)



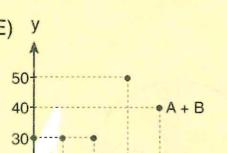
$$\Rightarrow A+B=?$$

B)



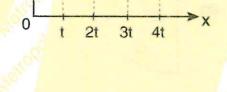
$$\Rightarrow A+B=?$$

C)



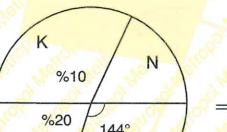
$$\Rightarrow A+B=?$$

D)



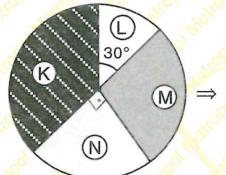
$$\Rightarrow A+B=?$$

E)



$$\Rightarrow A+B=?$$

2.



$$K+L+M+N=720$$

$$M-N+K-L=?$$

A) 120

B) 240

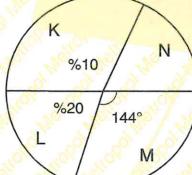
C) 320

D) 360

E) 480

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4.



$$\Rightarrow N=?$$

A) 10

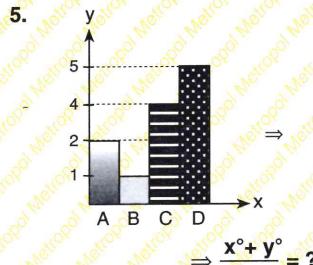
B) 20

C) 30

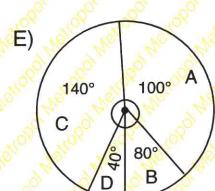
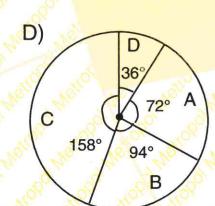
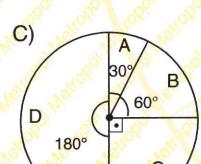
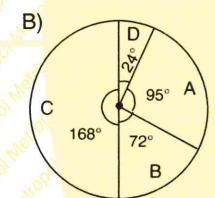
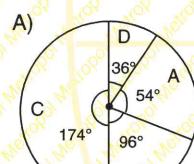
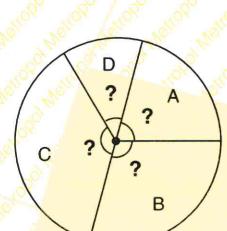
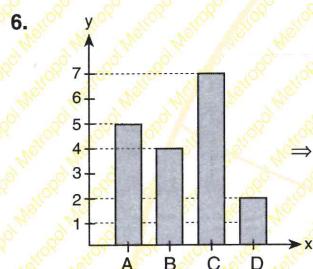
D) 40

E) 50

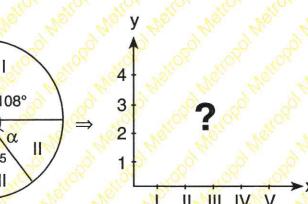
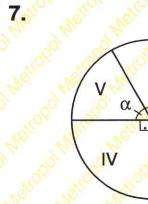
5.



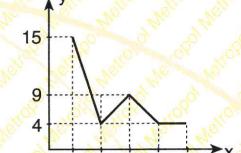
6.



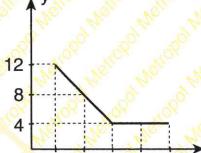
7.



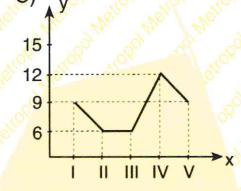
A)



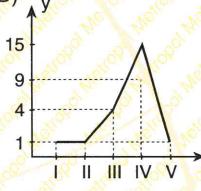
B)



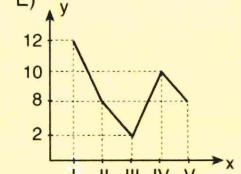
C)



D)



E)

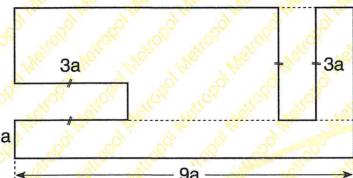


1	2	3	4	5	6	7
B	B	D	C	A	E	E

BÖLÜM 09 CHAPTER

Bölüm / Chapter 9

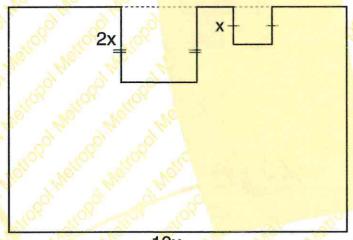
1.



$$\Rightarrow \text{Çevre / Perimeter} = ? \cdot a$$

- A) 34
- B) 36
- C) 38
- D) 40
- E) 42

2.



$$\Rightarrow \text{Çevre / Perimeter} = ? \cdot x$$

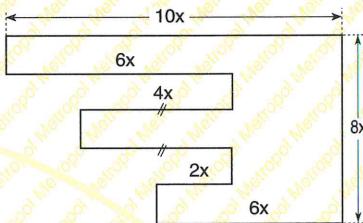
- A) 34
- B) 36
- C) 38
- D) 40
- E) 42

Çevre ve Alan / Perimeter and Area

ÇEVRE VE ALAN PERIMETER and AREA

Test 1

3.

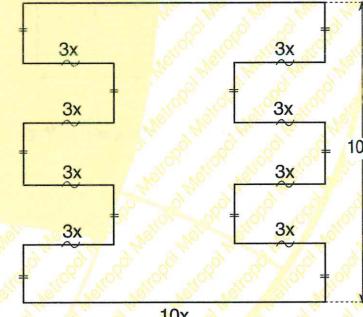


$$\Rightarrow \text{Çevre / Perimeter} = ? \cdot x$$

- A) 42
- B) 44
- C) 46
- D) 48
- E) 50

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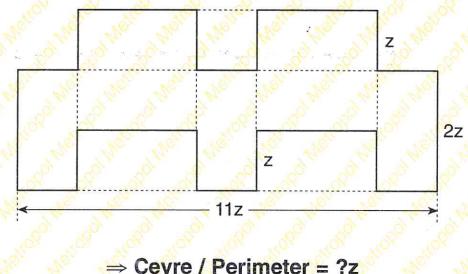
4.



$$\Rightarrow \text{Çevre / Perimeter} = ? \cdot x$$

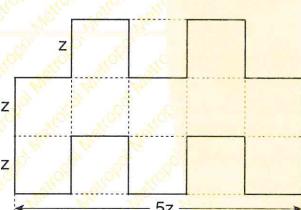
- A) 56
- B) 58
- C) 60
- D) 62
- E) 64

5.



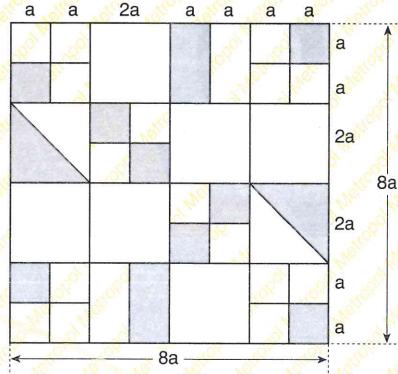
- A) 31
B) 32
C) 33
D) 34
E) 35

6.



- A) 20
B) 22
C) 24
D) 26
E) 28

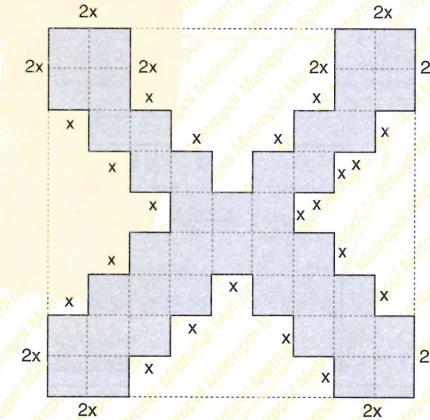
7.



- A) 8
B) 12
C) 16
D) 20
E) 24

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8.

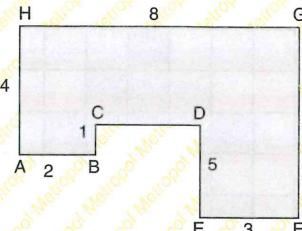


- A) 32
B) 33
C) 34
D) 35
E) 536

YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
C	C	D	E	D	B	C	D

1.

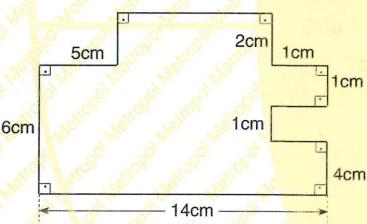


Yukarıdaki şenin alanı kaç cm^2 dir?

What's the area of shaded field?
 $(IABI = 2 \text{ cm}, IEFI = 3 \text{ cm}, IBCI = 1 \text{ cm}, IHGI = 8 \text{ cm}, IDEI = 5 \text{ cm}, IHAI = 4 \text{ cm})$

- A) 37 B) 39 C) 41 D) 42 E) 44

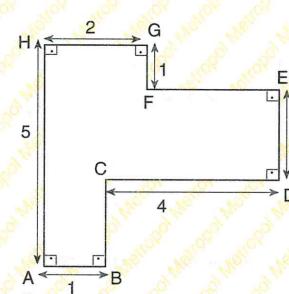
2.



Yukarıdaki şenin alanı kaç cm^2 dir?

What's the area of the figure above?
 A) 90 B) 97 C) 98 D) 99 E) 100

3.



Yukarıdaki şenin alanı kaç birim karedir?

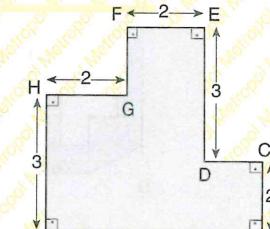
What's the area of given figure above?

- A) 12 B) 13 C) 14 D) 15 E) 16

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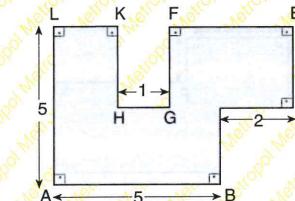
4. Yandaki şekilde taralı alan kaç birim karedir?

What's the area of shaded field?



- A) 14 B) 16 C) 20 D) 22 E) 24

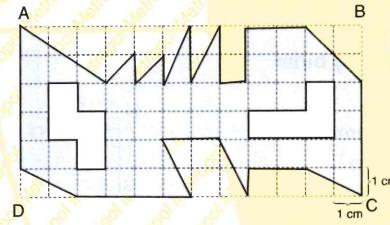
5.

**Yukarıdaki şenin alanı kaç birim karedir?**

What's the area of shaded field in the figure above?

- A) 25 B) 26 C) 27 D) 28 E) 29

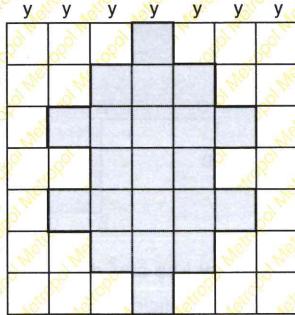
6.

**Yukarıdaki şenide verilenlere göre taralı alan kaç cm^2 dir?**

What's the area of shaded field in the figure above?

- A) 43 B) 44 C) 45 D) 46 E) 47

7.

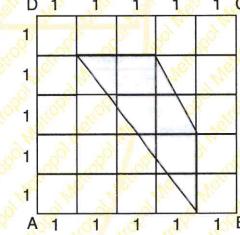
 $\Rightarrow \text{Çevre / Perimeter} = ? \text{ y}$

- A) 24 B) 26 C) 28 D) 30 E) 32

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8. Yandaki şenide taralı bölge nin alanı kaç cm^2 dir?

What's the area of shaded field?

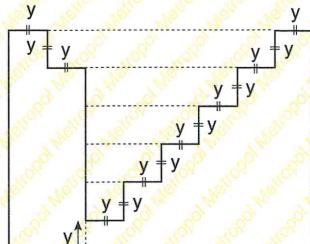


- A) 4 B) 4,5 C) 5 D) 5,5 E) 6

YANITLAR / ANSWERS

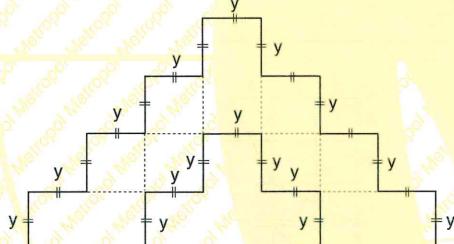
1	2	3	4	5	6	7	8
C	D	C	C	D	B	C	C

1.

 $\Rightarrow \text{Çevre / Perimeter} = ? y$

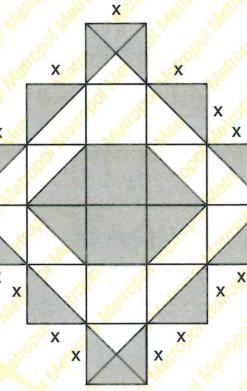
- A) 30
B) 36
C) 32
D) 38
E) 34

2.

 $\Rightarrow \text{Çevre / Perimeter} = ? y$

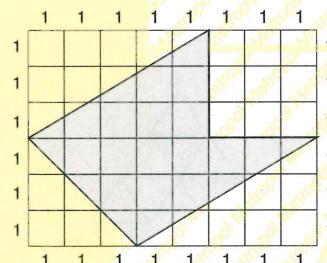
- A) 28
B) 26
C) 24
D) 22
E) 20

3.

 $\Rightarrow \text{Taralı Alan / The shaded area} = ? x^2$

- A) 8
B) 8,5
C) 9
D) 9,5
E) 10

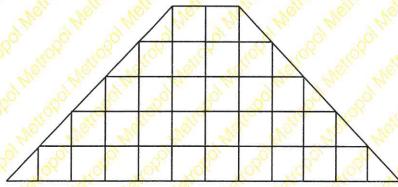
4.

Yukarıdaki şekilde taralı bölgenin alanı kaç cm^2 dir?

What's the area of shaded field?

- A) 10 B) $\frac{29}{2}$ C) $\frac{32}{3}$ D) $\frac{39}{2}$ E) $\frac{36}{5}$

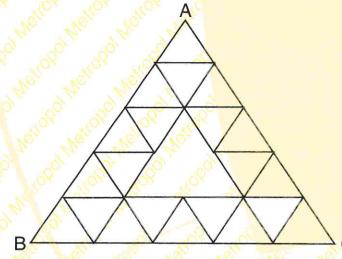
5.



Yukarıdaki şekilde toplam kaç tane kare vardır?

How many squares are in the figure above?
A) 35 B) 43 C) 40 D) 45 E) 46

6.

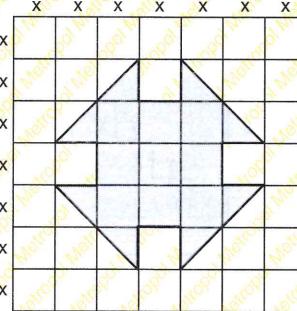


Yukarıdaki şekildeki üçgenler eşkenar üçgenlerdir. Buna göre, ABC üçgeninin alanı taralı bölgenin alanının kaç katıdır?

All the triangles in the figure are equilateral. What is the ratio of the area of $\triangle ABC$ to area of the shaded field?

- A) 4 B) 5 C) 6 D) 7 E) 8

7.

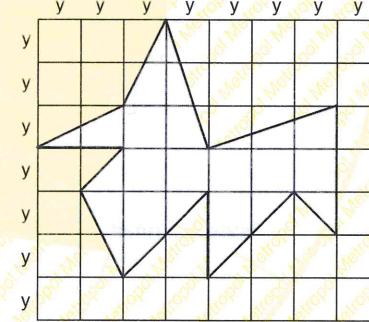


$\Rightarrow \text{Çevne / Perimeter} = ? \times$

- A) $2\sqrt{2} + 6$
B) $4\sqrt{2} + 8$
C) $4\sqrt{2} + 16$
D) $8\sqrt{2} + 8$
E) $8\sqrt{2} + 12$

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8.



$\Rightarrow \text{Taralı Alan / The shaded area} = ? y^2$

- A) 13
B) 14
C) 15
D) 16
E) 17



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8
D	B	D	D	A	B	E	E

BÖLÜM

10

CHAPTER

Bölüm / Chapter 10 Deneme Sınavları / Trial Exams Sınav/Exam 1

DENEME SINAVLARI TRIAL EXAMS

1.– 6. sorulardaki işlemlerde her harf veya şekil sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.
In questions 1 – 6 each letter or figure stands for a number different from zero and each other in the given operations. Find the value of letter or operations indicated by the question mark.

$$\begin{array}{r} A \mid B \\ - \quad 3 \\ \hline 0 \end{array} \quad \begin{array}{r} A \\ + B \\ \hline 8 \end{array} \quad \begin{array}{r} A \\ - B \\ \hline C \end{array} \Rightarrow A + B + C = ?$$

- A) 11 B) 12 C) 13 D) 14 E) 15

$$\begin{array}{r} KL \\ LK \\ + LL \\ \hline 110 \end{array} \quad \begin{array}{r} KL \\ - LK \\ \hline 36 \end{array} \Rightarrow K \times L = ?$$

- A) 8 B) 10 C) 12 D) 14 E) 16

$$\begin{array}{r} BAA \\ \times 1A \\ \hline 1B7A \\ + BAA \\ \hline 3CBA \end{array} \Rightarrow A = ?; B = ?; C = ?$$

- A) 5, 3, 7 B) 4, 2, 7 C) 5, 2, 8
D) 5, 2, 7 E) 4, 3, 8

$$\begin{array}{r} KLMK \\ + LKN1 \\ \hline M39L \end{array} \quad \begin{array}{r} M5L4 \\ - KNNT \\ \hline K8T9 \end{array} \Rightarrow K + T = ?$$

- A) 6 B) 7 C) 8 D) 9 E) 10

$$\begin{array}{r} 27K8 \\ 58K \\ + L8 \\ \hline NM52 \end{array} \Rightarrow L + M + N = ?$$

- A) 10 B) 13 C) 16 D) 19 E) 22

$$\begin{array}{r} KLL \\ + LLK \\ \hline MNMM \end{array} \Rightarrow M + N = ?$$

- A) 3 B) 4 C) 5 D) 6 E) 7

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7. I. $2 \blacktriangle 3 = 4; 6; 9$
 II. $2 \blacktriangle 1 = 4; 2; 1$
 III. $1 \blacktriangle 3 = 1; 3; 9$
 IV. $1 \blacktriangle 5 = ?; ?; ?$

Yukarıdaki dört eşitlikte \blacktriangle işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretlerinin yerine aşağıdakilerden hangileri gelmelidir?

In the equations above, the function of \blacktriangle remains unchanged. What are the question marks stand for in the fourth equation?

- A) 1; 2; 5 B) 2; 5; 5 C) 1; 5; 25
 D) 2; 1; 25 E) 3; 5; 20

8. I. $5 \triangle 4 = 1; 20$
 II. $7 \triangle 3 = 4; 21$
 III. $4 \triangle 3 = 1; 12$
 IV. $6 \triangle 6 = ?; ?$

Yukarıdaki dört eşitlikte \triangle işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretlerinin yerine aşağıdakilerden hangileri gelmelidir?

In the equations above, the function of \triangle remains unchanged. What are the question marks stand for in the fourth equation?

- A) 1; 12 B) 0;12 C) 0; 36 D) 1; 36 E) 12; 36

9. I. $a * b = a^2 - b + 1$
 II. $a \circ b = a + b^2 + 2$
 III. $a \blacktriangle b = 2a + 2b + 4$
 IV. $(4 * 2) \blacktriangle (3 * 5) = ?$

Yukarıdaki ilk üç eşitlikte $*$, \blacktriangle ve \circ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $*$, \blacktriangle and \circ are given. What does the question mark stand for in the fourth equation?

- A) 30 B) 32 C) 34 D) 36 E) 38

10. I. $2 \triangle 1 = \frac{5}{2}$
 II. $4 \triangle 2 = 5$
 III. $3 \triangle 3 = \frac{9}{2}$
 IV. $\frac{2}{x} \triangle 2 \cdot y = ?$

Yukarıdaki dört eşitlikte \triangle işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \triangle remains unchanged. What does the question mark stand for in the fourth equation?

- A) $\frac{xy+1}{x}$ B) $\frac{xy+2}{x}$ C) $\frac{2xy+1}{x}$
 D) $\frac{2xy+2}{x}$ E) $\frac{4xy+2}{x}$

11. I. $a^3 \bullet 2-b = a + b^2$

II. $3-a \circ b^2 = \frac{a}{2} + 3-b$

III. $4-a \diamond 3-b = a^2 + b^3$

IV. $(8 \diamond 6) \circ (125 \bullet 4) = ?$

Yukarıdaki ilk üç eşitlikte \bullet , \circ ve \diamond işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \bullet , \circ and \diamond are given.

What does the question mark stand for in the fourth equation?

- A) 8 B) 9 C) 10 D) 11 E) 12

12. I. $a \triangle b = 2-a \bullet b$

II. $a \circ b = a \triangle 2-b$

III. $a \bullet b = \frac{a-b}{2}$

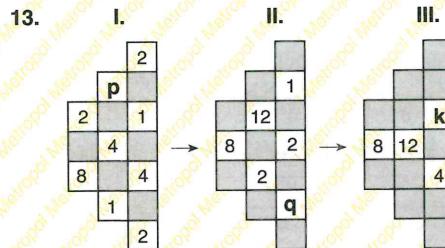
IV. $(2 \circ 3) \triangle (4 \bullet 5) = ?$

Yukarıdaki ilk üç eşitlikte \triangle , \bullet ve \circ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \triangle , \bullet and \circ are given.

What does the question mark stand for in the fourth equation?

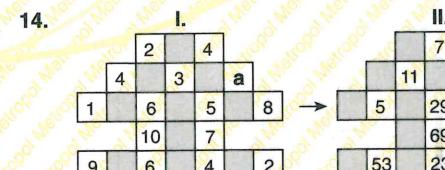
- A) 80 B) 100 C) 120 D) 140 E) 160



13. I. \rightarrow II. \rightarrow III.
 $\Rightarrow p + q + k = ?$

- A) 5 B) 7 C) 9 D) 11 E) 13

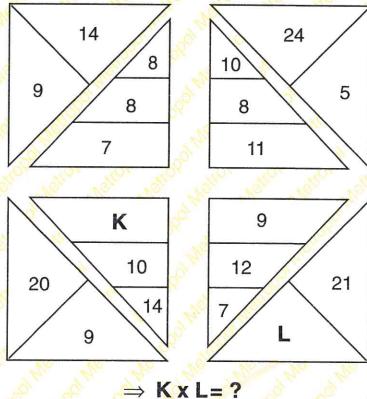
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14. I. \rightarrow II.
 $\Rightarrow a - b = ?$

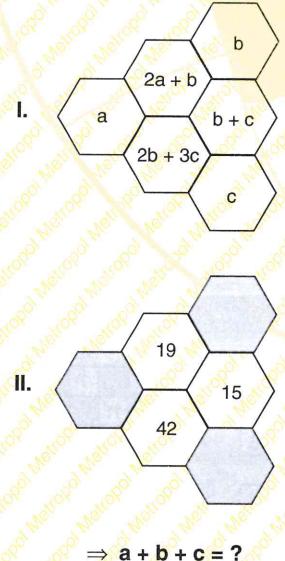
- A) 2 B) 4 C) 3 D) 1 E) 0

15.



- A) 25 B) 30 C) 35 D) 40 E) 45

16.



- A) 23 B) 38 C) 46 D) 57 E) 61

17.

x	a	b	c
a		96	
b			
c	192	128	

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre a + b + c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific number. What is the value of $a + b + c$?

- A) 30 B) 32 C) 34 D) 36 E) 38

18.

+	2-a	3-b	c
a		40	
b			19
c	15		

$$\Rightarrow 3-a + 2-b = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $3-a + 2-b$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of $3-a + 2-b$?

- A) 32 B) 33 C) 34 D) 35 E) 36

19.

+	a	b	c
a		$c+6$	
b			a
c			$b+27$

$$\Rightarrow c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of c?

- A) 13 B) 14 C) 15 D) 16 E) 17

Deneme Sınavı 1

20.

+	a	b	c
a			20
b			

$$\Rightarrow a - b + c = ?$$

x	a	b	c
a			48
b			72

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri
belli birer sayının yerine kullanılmıştır. Buna göre,
 $a - b + c$ kaçtır?

In the summation and multiplication tables above, the letters a, b ve c each stand for a specific numeral. What is the value of a
 $- b + c$?

- A) 13 B) 14 C) 15 D) 16 E) 17

21.

24	15	26	17	28	19
45	66	47	68	M	70
30	21	32	23	34	K
51	72	53	N	55	76
36	L	38	29	40	31
57	78	59	80	61	82

$$\Rightarrow (K + N) - (L + M) = ?$$

Yukarıdaki tabloda $(K + N) - (L + M)$ kaçtır?

What is the value of $(K + N) - (L + M)$ in table above?

- A) 22 B) 23 C) 24 D) 25 E) 26

22.

Sonuç (Result)					
4	3	5	7	9	5
6	8	5	1	3	7
2	7	6	9	4	3
5	8	3	2	1	K
4	7	2	6	5	5
3	2	4	L	8	

$$\Rightarrow K + L = ?$$

Yukarıdaki sayı tablosunda, sonuç bölümündeki sayıların
yazımında bir kurala bağlı kalınmıştır. Bu kurala göre,
 $K + L$?

In the numbers table given, the resultant number are formed
with an order. So, what is the value of $K + L$?

- A) 10 B) 11 C) 12 D) 13 E) 14

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23.

△□○	○□□	△□△
○□△	○○	○□
□□△	□○	?
△△○	△○	△□

Yukarıdaki tabloda soru işaretinin yerine hangi şekiller gelmelidir?

Which figures do question mark stand for in the table above?

- A) □, △ B) △, ○ C) △, □
D) ○, □ E) □, □

24.

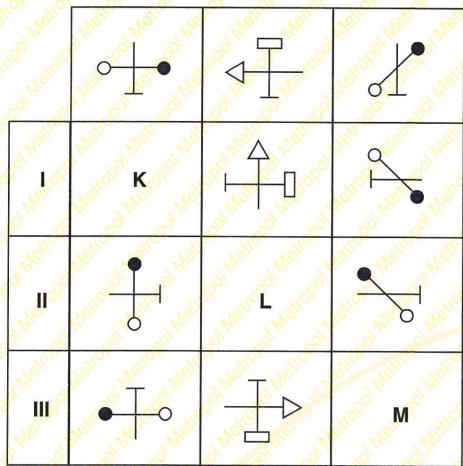
KKLM	LMK	MLM
MKL	K	—
LLM	KKL	?
KLMM	KM	M

Yukarıdaki tabloya göre soru işaretinin yerine hangi harfler gelmelidir?

Which words do question mark stand for in the table above?

- A) ML B) MM C) KL D) LL E) KK

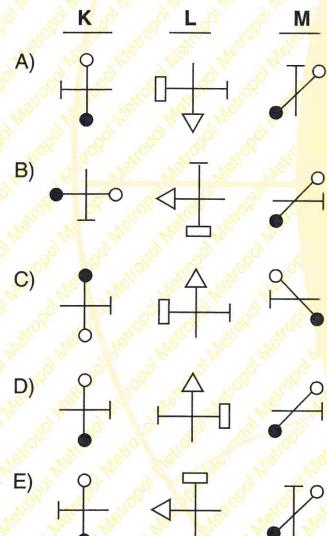
25.



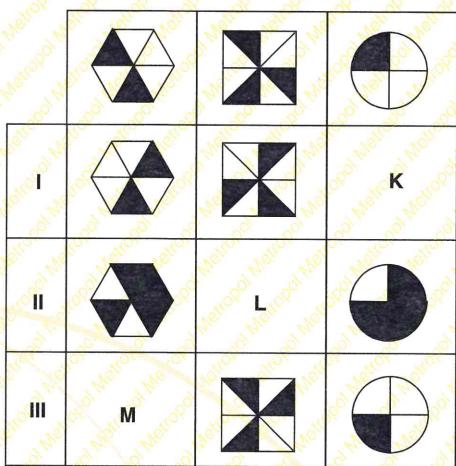
$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



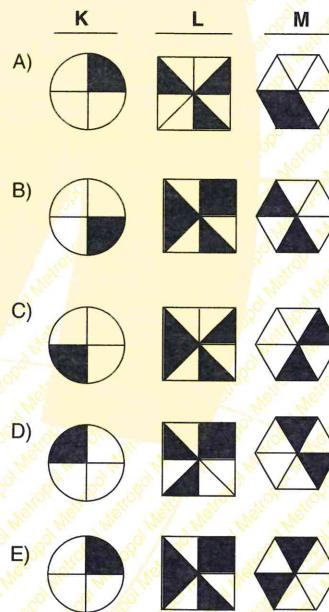
26.



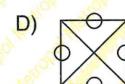
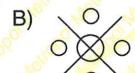
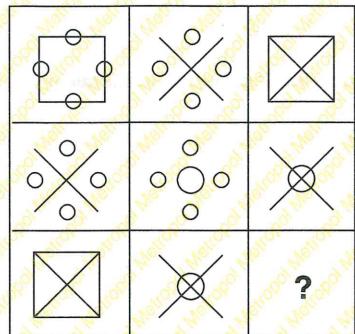
$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

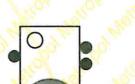
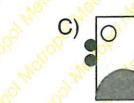
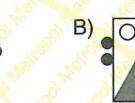
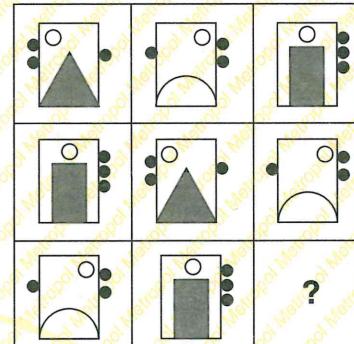
Which figures do K, L and M question mark stand for in the table above?



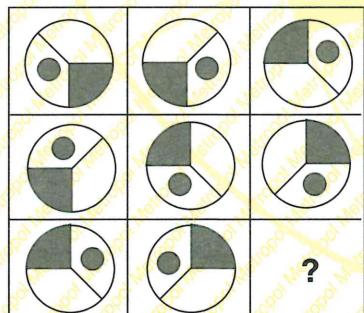
27.



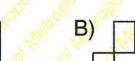
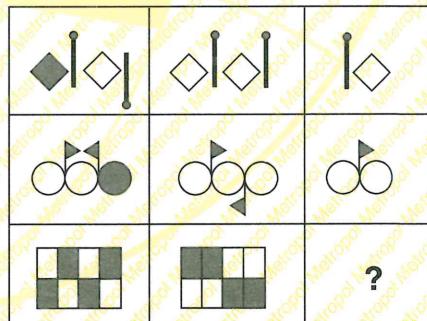
29.



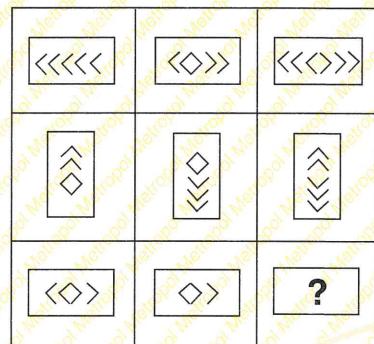
28.



30.



31.

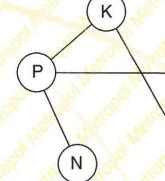


- A) B) C) D) E)

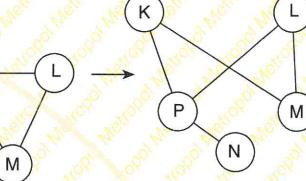
32. ve 33. soruları örnekte verilen ilişkiye göre cevaplayınız.

In questions 32 – 33, find the correct answer in accordance with the relationship established in the example below.

ÖRNEK / EXAMPLE:



Sekil I
Figure I



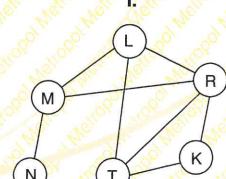
Sekil II
Figure II

K, L, M, N ve P harfleri I. şekildeki gibi birbirine bağlanmıştır.

I. şekildeki bağlantı sayıları ve birbirine bağlanan harfler değişimemek koşuluyla II. şekil elde edilmiştir.

Letters K, L, M, N and P are linked as in Figure I. Figure II has been constructed so as not to change which letters are linked to which, and the number of links made with each letter, in Figure I.

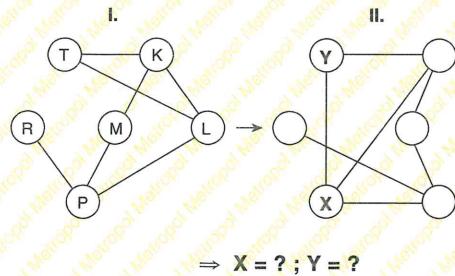
32.



$$\Rightarrow X = ? ; Y = ?$$

- | | | | |
|---|---|---|---|
| X | T | L | Y |
|---|---|---|---|
- A) T B) M C) L D) M E) L
- | | | |
|---|---|---|
| T | R | K |
|---|---|---|
- A) T B) M C) L D) T E) K

33.



- A) M P
B) P L
C) L T
D) T K
E) L M

34.

I.

$$\equiv ((4-a) + (3 \cdot 3-b) + (c)^2)^2 \cdot 4$$

II.

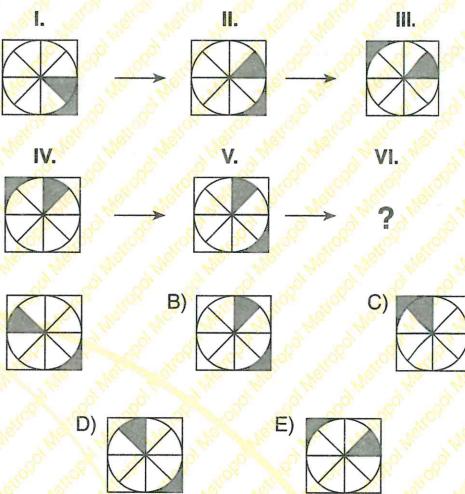
$$\equiv ((6 \cdot 2) + (3 \cdot 3) + (4)^2) \cdot 6$$

III.

$$\equiv ?$$

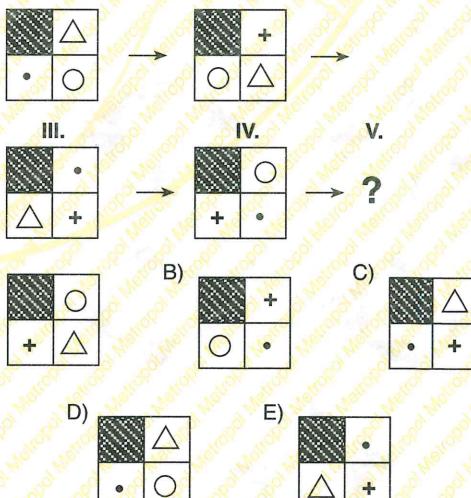
- A) 504 B) 516 C) 524 D) 532 E) 548

35.

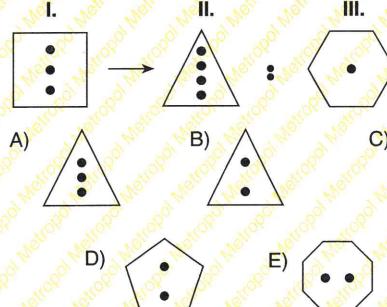


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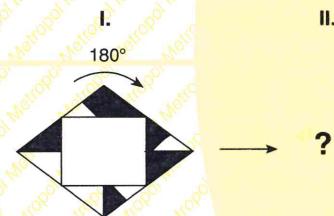
36.



37.

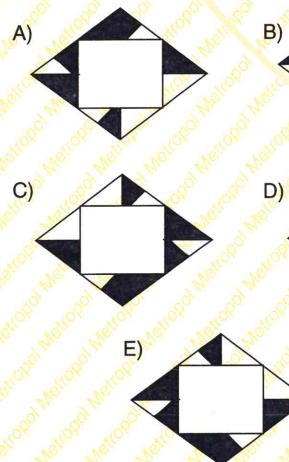


38.

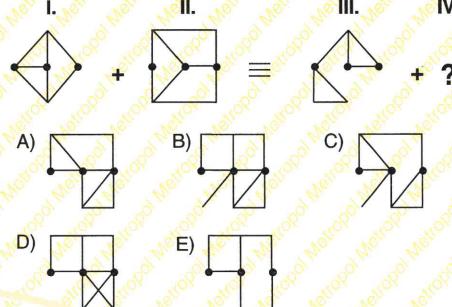


Yukarıdaki şekil 180° döndürülüğünde aşağıdaki şekillerden hangisi oluşur?

When the figure above rotates 180° , which of the following figure is formed?

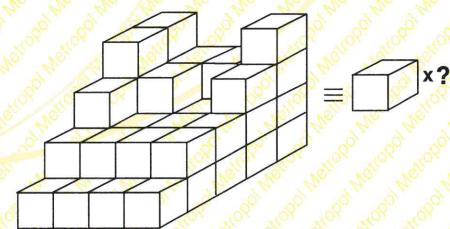


39.



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40.



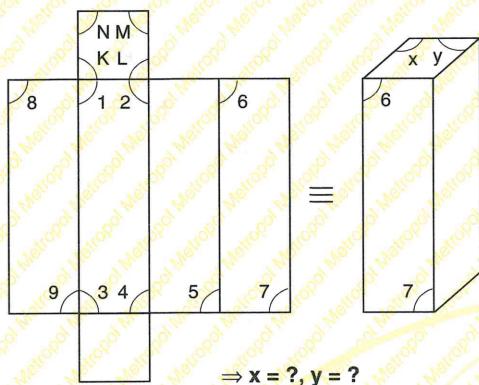
Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 44 B) 45 C) 46 D) 47 E) 48

Deneme Sınavı 1

41.

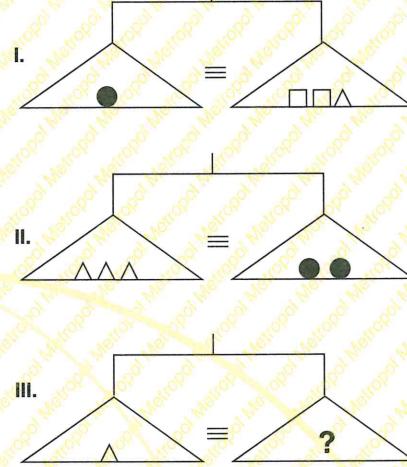


Yukarıdaki şekiller aynı nesneyi göstermektedir. Buna göre, x ve y nin yerine gelmesi gereken harfler aşağıdakilerden hangileridir?

The figures above represent the same object. So which of the following letters are x and y ?

- A) K; L B) L; K C) K; N D) L; M E) N; M

42.



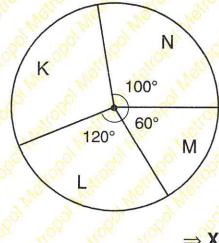
I. ve II. eşit kolu teraziler dengede olduğuna göre, III. terazi-nin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

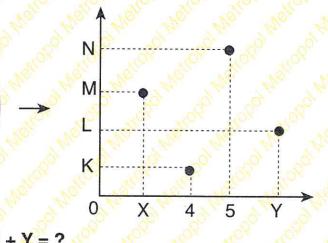
- A) \square B) $\square\square$ C) $\square\square\square$
 D) $\square\square\square\square$ E) $\square\square\square\square\square$

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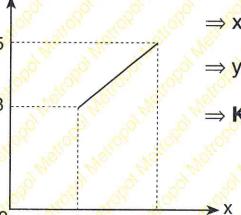
43.



- A) 8 B) 9 C) 10 D) 11 E) 12



45.

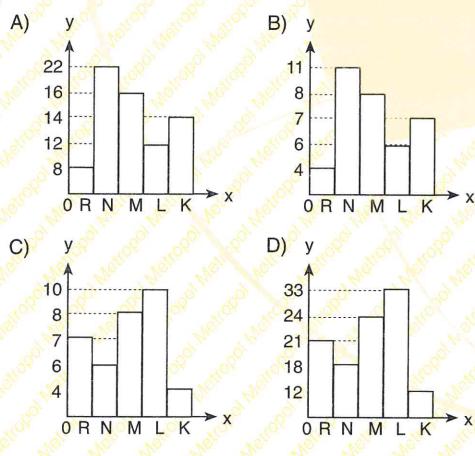


- A) 53 B) 54 C) 55 D) 56 E) 57

$$\begin{aligned}x &= 36 \Rightarrow y = K \\y &= 19 \Rightarrow x = L \\&\Rightarrow K + L = ?\end{aligned}$$

44.

K	8
L	22
M	16
N	12
R	14



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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
B	C	C	A	C	A	C	C	C
10	11	12	13	14	15	16	17	18
B	D	C	D	E	C	A	D	E
19	20	21	22	23	24	25	26	27
C	B	B	C	E	C	A	E	C
28	29	30	31	32	33	34	35	36
B	B	A	C	C	C	B	D	D
37	38	39	40	41	42	43	44	45
D	E	C	D	B	D	B	D	C

1.

+	a	b	c
a		22	
b			37
c	33		

$$\Rightarrow b = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 9 B) 13 C) 17 D) 21 E) 24

2.

+	a	b	c
a		$3c+4$	
b			$2a+4$
c	b		

$$\Rightarrow a + c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + c kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of a + c?

- A) 12 B) 14 C) 16 D) 18 E) 20

3.

x	a	b	c
a		72	
b			42
c	84		

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + b + c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of $a + b + c$?

- A) 22 B) 23 C) 24 D) 25 E) 26

4.

x	a	b	c
a		$2-c$	
b			$2-a^3$
c	b^2		

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + b + c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of $a + b + c$?

- A) 20 B) 22 C) 24 D) 26 E) 28

5.

\div	a	b	c
a			
b	c		
c	16	c	

$$\begin{aligned} a &> b > c \\ \Rightarrow a + b &= ? \end{aligned}$$

Yukarıdaki bölme tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + b kaçtır?

In the division table above, the letters a, b and c each stand for a specific numeral. What is the value of a + b ?

- A) 20 B) 24 C) 48 D) 68 E) 80

6.

+	a	b	c
a	b	c	e
b	c	e	f
c	e	f	d

x	a	b	c
a	b	e	d
b	e	h	k
c	d	k	m

$$\Rightarrow e + f + d = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b, c, d e, f, h, k ve m harfleri belli birer sayının yerine kullanılmıştır. Buna göre, e + f + d kaçtır?

In the summation and multiplication table above, the letters a, b, c, d e, f, h, k and m each stand for a specific numeral. What is the value of e + f + d ?

- A) 22 B) 24 C) 26 D) 28 E) 30

7.

$\Delta \square \bullet \circ$	$\bullet \Delta$	K
$\circ \square \Delta$	$\square \Delta$	O
$\bullet \square$	L	\square
$\Delta \bullet \square$	$\square \bullet$	Δ

$$\Rightarrow K = ? ; L = ?$$

Yukarıdaki tabloda K ve L nin yerine hangi şekiller gelmelidir?

Which figures do K and L stand for in the table above?

	K	L
A)	$\square \bullet$	$O \Delta$
B)	$\square \circ$	\bullet
C)	$\Delta \square$	$\Delta \Delta$
D)	$\square \bullet$	$\Delta \bullet$
E)	$\square \square$	\square

8.

	Δ	□	●	*	▲
Δ	*	▲	*	□	Δ
□	▲	●	Δ	*	M
●	K	Δ	Δ	□	□
*	□	*	L	▲	Δ
▲	Δ	●	□	Δ	□

$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloda K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M stand for in the table above?

K	L	M
A) *	●	△
B) △	●	●
C) △	□	*
D) □	*	△
E) *	□	●

9.

	KLM	NKLM	KLMM
ABA	AK	AN	X
DACB	BK	BN	BK
BADC	CK	Y	CK

$$\Rightarrow X = ?; Y = ?$$

Yukarıdaki tabloda X ve Y nin yerine hangi harfler gelmelidir?

Which letters do X and Y stand for in the table above?

- A) AN; CN
- B) AL; CM
- C) AK; BK
- D) AK; CN
- E) AL; BL

10.

			
I	K		
II		L	
III			M

$$\Rightarrow K = ?; L = ?; M = ?$$

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K	L	M
A) 		
B) 		
C) 		
D) 		
E) 		

Deneme Sınavı 2

11.

●	5	7	9
4			65
2	K	45	

▲	4	7	2
3	L		13
6		85	

$$\Rightarrow K + L = ?$$

Yukarıdaki tablolarda ● ve ▲ işlemlerinin kuralları verilmiştir. Buna göre, K + L kaçtır?

According to the rules of ● and ▲ operations established in the table above, what is the value of K + L ?

- A) 45 B) 46 C) 47 D) 48 E) 49

12.

★	2	5	8	13
1	K	5	9	13
4	2	9	M	17
9	11	L	17	117
16	14	21	8	29

$$\Rightarrow K = ? ; \quad L = ? ; \quad M = ?$$

Yukarıdaki tabloda ★ işleminin kuralı verilmiştir. Buna göre, K, L ve M kaçtır?

According to the rule of ★ operation established in the table above, what is the value of K, L and M?

- A) 3; 14; 4 B) 3; 5; 12 C) 1; 45; 4
D) 3; 45; 4 E) 2; 14; 12

13.

●	2	5	8	6	10
4	3	2	5	1	7
9	5	1	4	3	2
3	6	7	2	10	5
7	4	3	1	8	6
1	7	9	10	3	5

$$\Rightarrow [(4 \bullet 8) \bullet (2 \bullet 7)] \bullet (5 \bullet 1) = ?$$

Yukarıdaki tabloda ● işleminin kuralı verilmiştir. Buna göre, $[(4 \bullet 8) \bullet (2 \bullet 7)] \bullet (5 \bullet 1)$ kaçtır?

According to the rule of ● operation established in the table above, what is the value of $[(4 \bullet 8) \bullet (2 \bullet 7)] \bullet (5 \bullet 1)$?

- A) 2 B) 3 C) 5 D) 8 E) 10

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14.

7	3	3	4	3
4	4	2	5	6
6	3	2	1	6
2	7	1	2	X
3	5	2	4	3

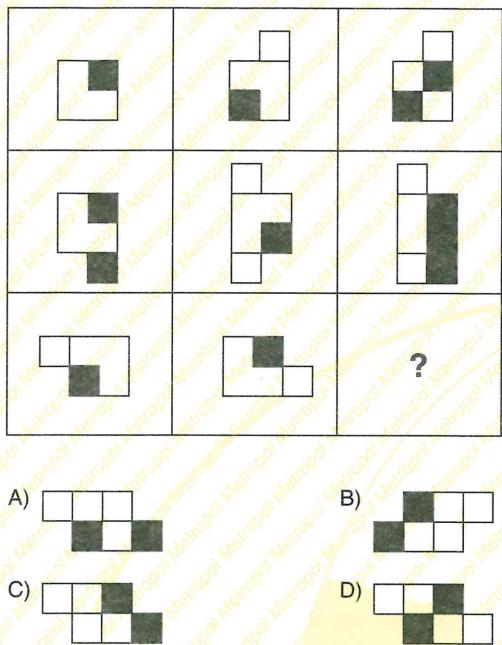
$$\Rightarrow X = ?$$

Yukarıdaki tabloda X in yerine hangi sayı gelmelidir?

Which number do X stand for in the table above?

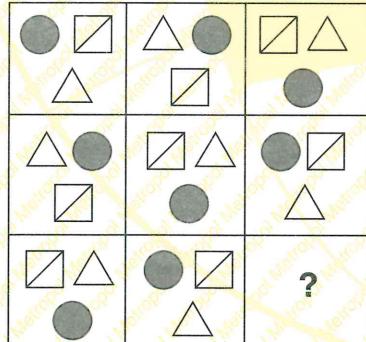
- A) 5 B) 6 C) 7 D) 8 E) 9

15.



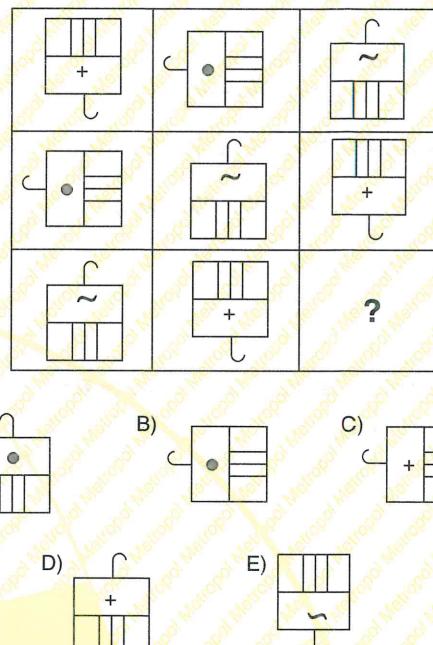
- A)
- B)
- C)
- D)
- E)

16.



- A)
- B)
- C)
- D)
- E)

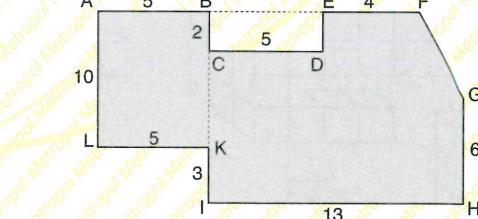
17.



- A)
- B)
- C)
- D)
- E)

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18.



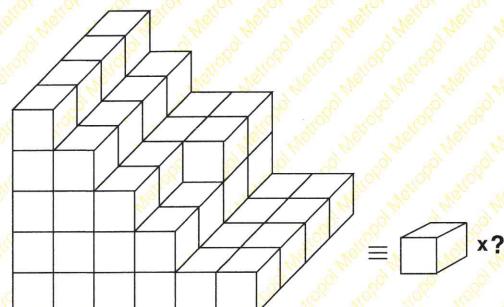
$$IABI = 5 \text{ cm}, IBCI = 2 \text{ cm}, ICDI = 5 \text{ cm}, IEFI = 4 \text{ cm},$$

$$IGHI = 6 \text{ cm}, IHII = 13 \text{ cm}, IIKI = 3 \text{ cm}, IKLI = 5 \text{ cm},$$

$IALI = 10 \text{ cm} \Rightarrow \text{Tarali alan (Shaded area)} = ?$

- A) 195 B) 190 C) 187
D) 182 E) 145

19.

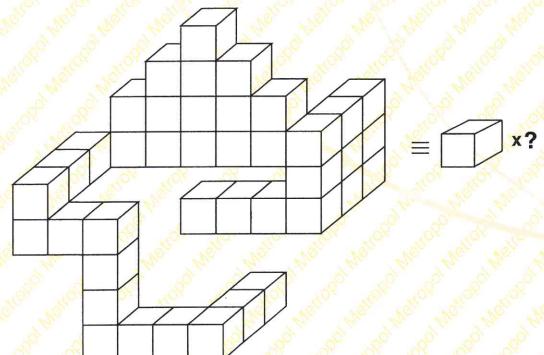


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 70 B) 69 C) 68 D) 67 E) 66

20.

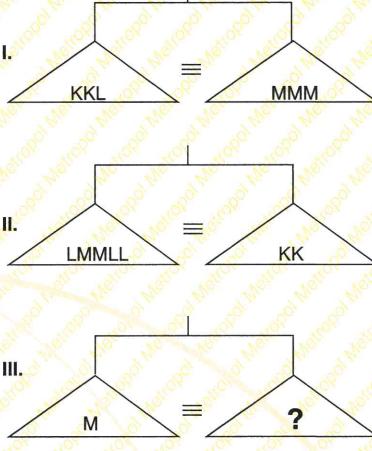


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 38 B) 39 C) 40 D) 41 E) 42

21.



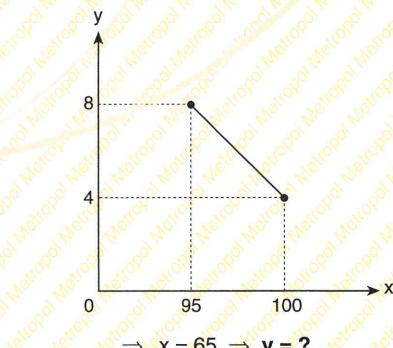
I. ve II. eşit kolu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen kütler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) L B) LL C) LLL
D) LLLL E) LLLLL

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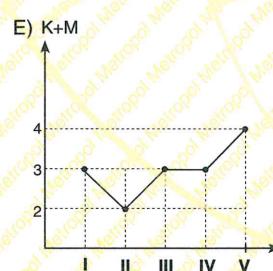
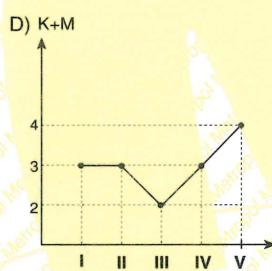
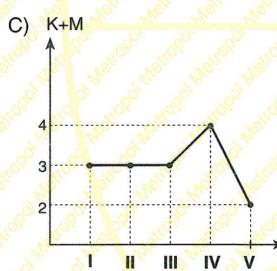
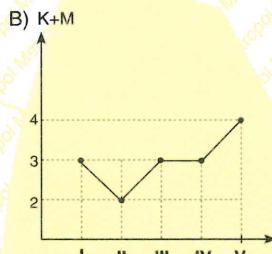
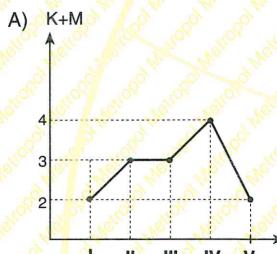
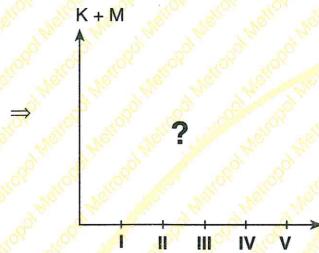
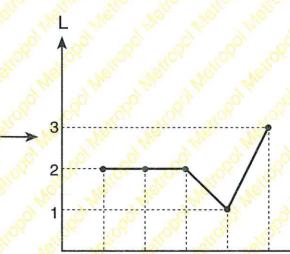
22.



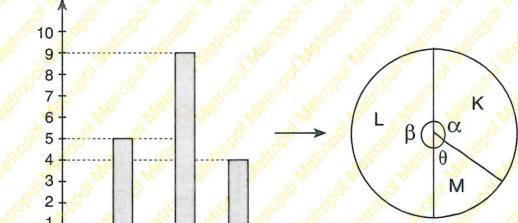
- A) 26 B) 28 C) 30 D) 32 E) 34

23.

I	II	III	IV	V
K	K	L	M	L
L	M	M	K	L
K	L	M	K	L
L	L	K	M	K
M	M	L	L	K



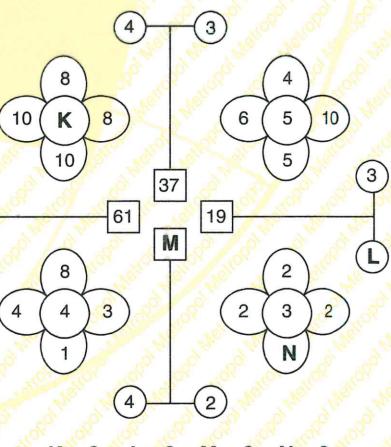
24.



- A) 120 B) 140 C) 150 D) 160 E) 170

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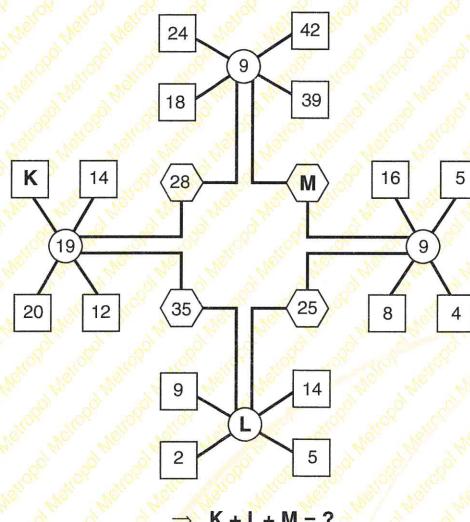
25.



$$\Rightarrow K = ?, \quad L = ?, \quad M = ?, \quad N = ?$$

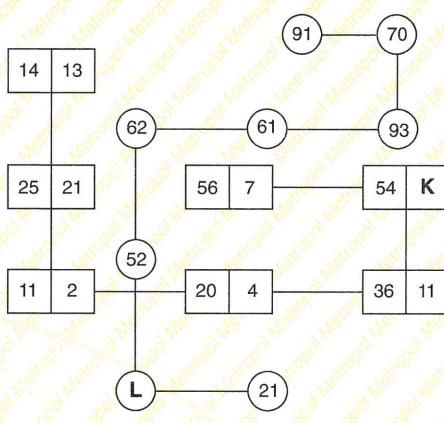
	K	L	M	N
A)	6	1	60	3
B)	6	2	56	3
C)	5	2	60	2
D)	5	3	56	2
E)	4	1	58	3

26.



- A) 70 B) 71 C) 72 D) 73 E) 74

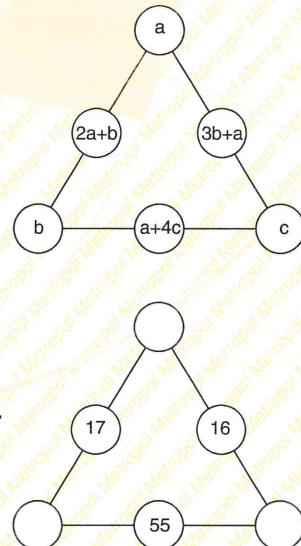
27.



- A) 18; 32 B) 17; 42 C) 16; 65
D) 16; 53 E) 18; 86

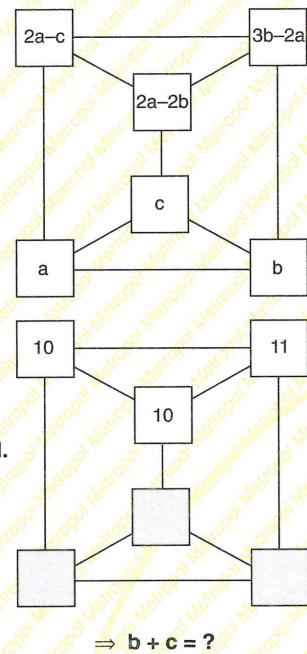
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28.



- A) 21 B) 22 C) 23 D) 24 E) 25

29.



A) 61

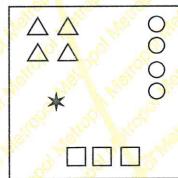
B) 62

C) 63

D) 64

E) 65

30.

 $\rightarrow 4; 4; 3; 1$  $\rightarrow 5; 3; 3; 3$  $\rightarrow ?; ?; ?; ?$

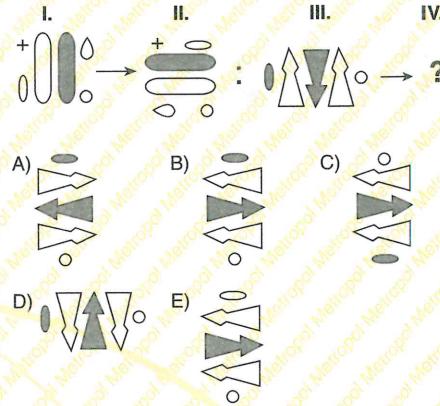
A) 4; 5; 2; 2

C) 2; 4; 2; 5

D) 5; 4; 2; 2

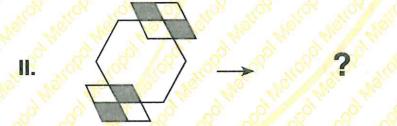
E) 4; 2; 2; 5

31.



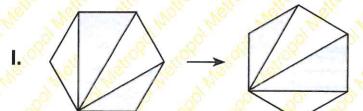
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32.



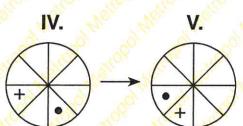
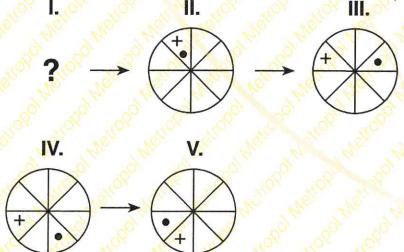
- A)
- B)
- C)
- D)
- E)

33.



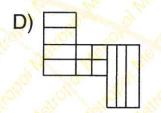
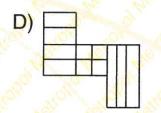
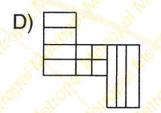
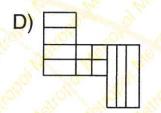
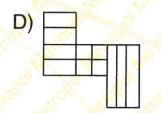
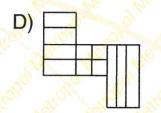
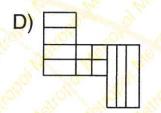
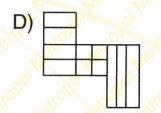
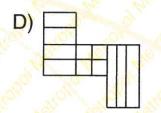
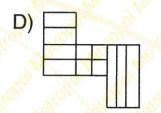
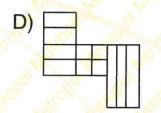
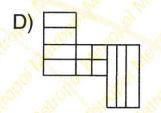
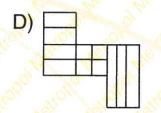
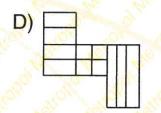
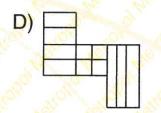
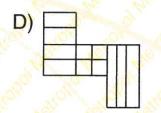
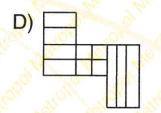
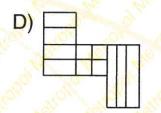
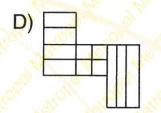
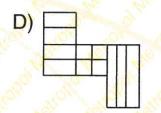
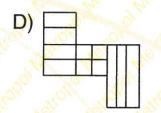
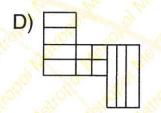
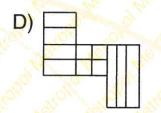
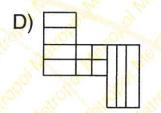
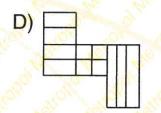
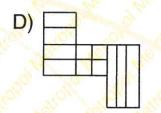
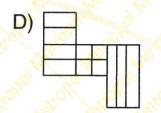
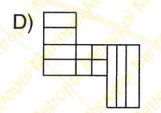
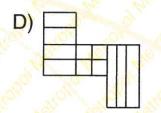
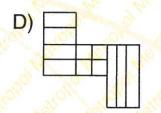
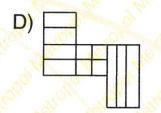
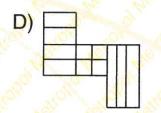
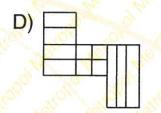
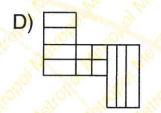
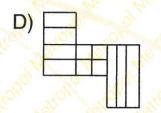
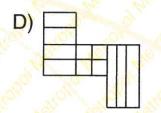
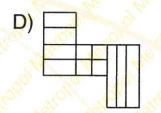
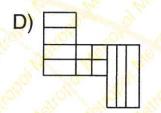
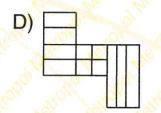
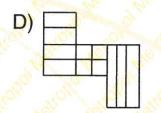
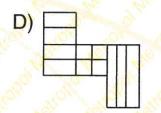
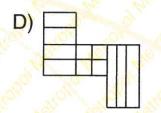
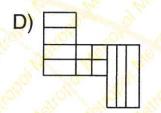
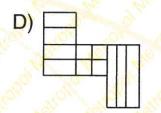
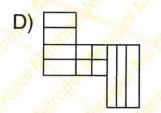
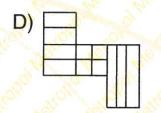
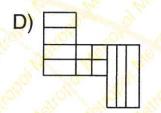
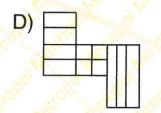
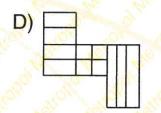
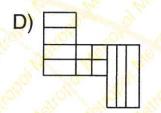
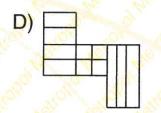
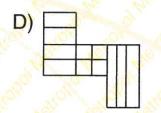
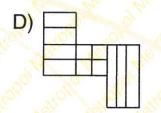
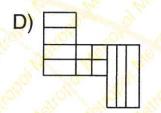
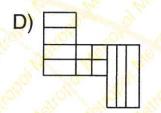
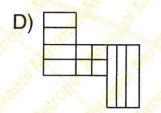
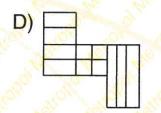
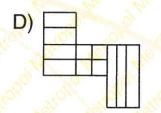
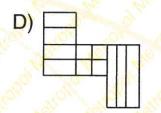
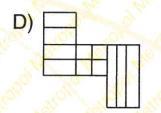
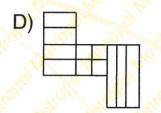
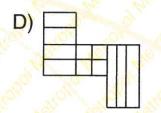
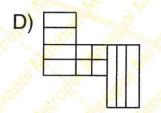
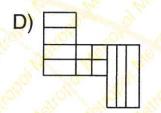
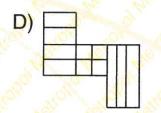
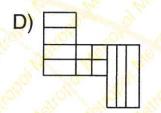
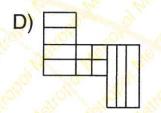
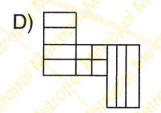
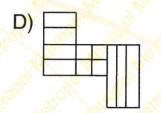
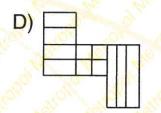
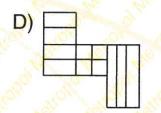
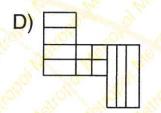
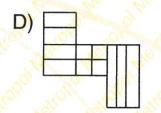
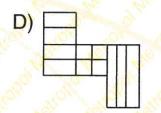
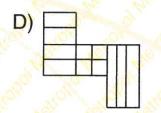
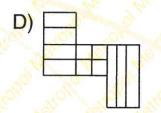
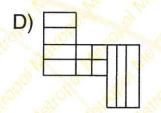
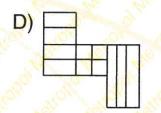
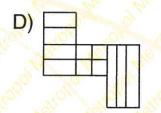
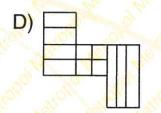
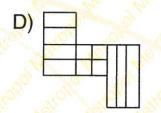
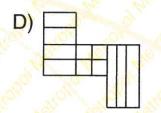
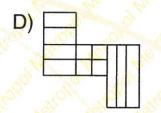
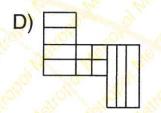
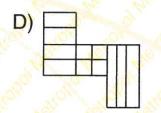
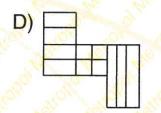
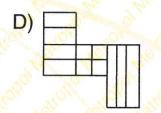
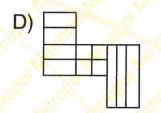
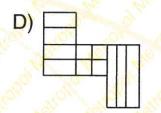
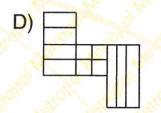
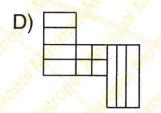
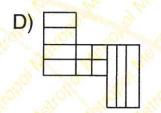
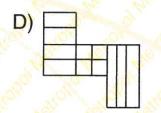
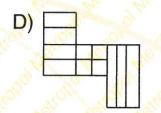
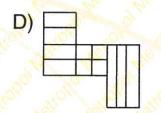
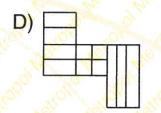
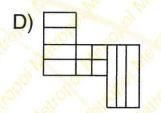
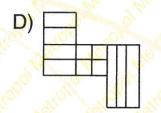
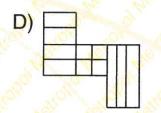
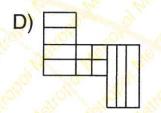
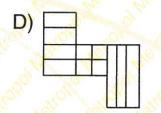
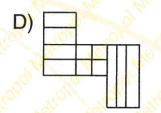
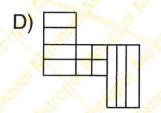
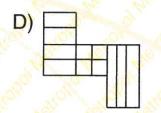
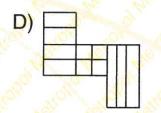
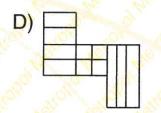
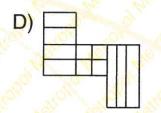
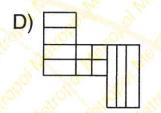
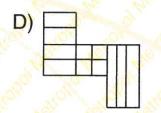
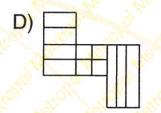
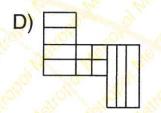
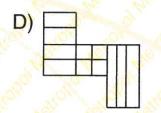
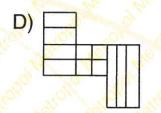
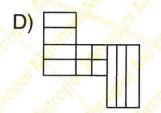
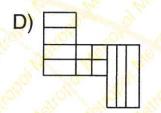
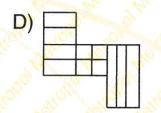
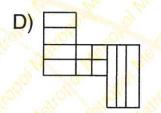
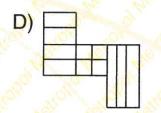
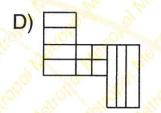
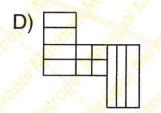
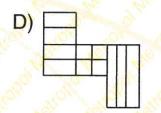
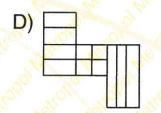
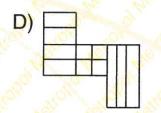
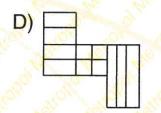
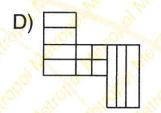
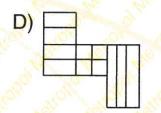
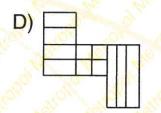
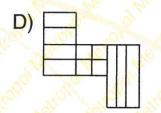
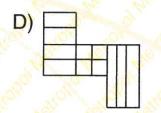
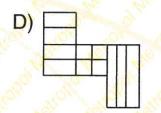
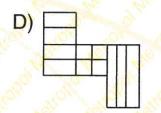
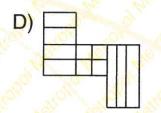
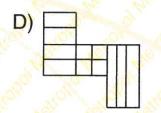
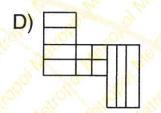
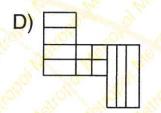
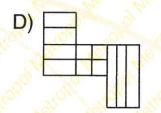
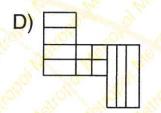
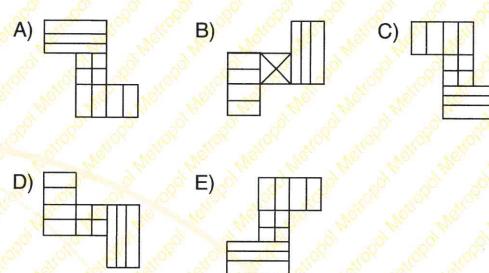
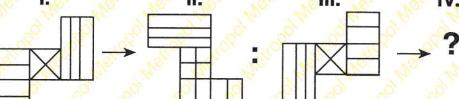
- A) B) C) D) E)

34.



- A) B) C) D) E)

35.



36. I. $7 \oplus 4 = 25$
 II. $12 \oplus 2 = 38$
 III. $4 \oplus 9 = 21$
 IV. $8 \oplus 5 = ?$

Yukarıdaki dört eşitlikte \oplus işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \oplus remains unchanged. What does the question mark stand for in the fourth equation?

- A) 26 B) 27 C) 28 D) 29 E) 30

37. I. $a \square b = \begin{cases} 2a^2 - b, & a \cdot b > 1 \\ a + b, & a = b \\ a^2 - 2b, & a \cdot b < 0 \end{cases}$

II. $(1 \square 2) \square (-4 \square 8) = ?$

Yukarıdaki iki eşitlikte \square işaretinin görevi aynıdır. Buna göre, ikinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \square remains unchanged. What does the question mark stand for in the second equation?

- A) -2 B) -1 C) 0 D) 1 E) 2

38. I. $(2x + 1, y - 2) \diamond (z \cdot x, t + y) = \left(\frac{x+y}{z}, \frac{z+t}{y} \right)$

II. $(11, 8) \diamond (35, 24) = ?$

Yukarıdaki iki eşitlikte \diamond işaretinin görevi aynıdır. Buna göre, ikinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \diamond remains unchanged. What does the question mark stand for in the second equation?

- A) $\left(\frac{7}{15}, \frac{21}{10} \right)$ B) $\left(\frac{15}{7}, \frac{21}{10} \right)$ C) $\left(\frac{13}{7}, \frac{10}{21} \right)$
 D) $\left(\frac{13}{7}, \frac{8}{21} \right)$ E) $\left(\frac{15}{7}, 2 \right)$

39. I. $a \bullet b = 2a + 3b$

II. $a * b = 4a + b$

III. $a \Delta b = a + 2b$

IV. $((4 \Delta 2) \bullet 3) * 14 = ?$

Yukarıdaki ilk üç eşitlikte \bullet , $*$ ve Δ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \bullet , $*$ and Δ are given. What does the question mark stand for in the fourth equation?

- A) 111 B) 112 C) 113 D) 114 E) 115

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40. I. $10 \diamond 6 = 4$

II. $16 \diamond 8 = 3$

III. $8 \diamond 2 = \frac{5}{3}$

IV. $a \diamond \frac{1}{b} = ?$

Yukarıdaki dört eşitlikte \diamond işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \diamond remains unchanged. What does the question mark stand for in the fourth equation?

- A) $\frac{ab}{ab+1}$ B) $\frac{ab}{ab-1}$ C) $\frac{ab-1}{b}$
 D) $\frac{ab+1}{b}$ E) $\frac{ab+1}{ab-1}$

41.- 45. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretleri ile belirtilen harf ya da işlemin değerini bulunuz.

IN questions 41 - 45 each letter stands for a number different from zero and each other in the given operations.

Find the value of letter or operation indicated by the question mark.

$$\begin{array}{r} \text{B3C46} \\ + \quad 253A \\ \hline 96284 \end{array} \Rightarrow A + B + C = ?$$

- A) 24 B) 25 C) 26 D) 27 E) 28

$$\begin{array}{r} \text{KKKK} \\ \text{KKK} \\ \text{KK} \\ + \quad K \\ \hline 7M04 \end{array} \Rightarrow M = ?$$

- A) 4 B) 5 C) 6 D) 7 E) 8

$$\begin{array}{r} \text{ABAB} \\ + \quad \text{BAAB} \\ \hline 12194 \end{array} \Rightarrow 2A + 3B = ?$$

- A) 25 B) 26 C) 27 D) 28 E) 29

44.

$$\begin{array}{r} 9BC \\ - \quad A2 \\ \hline 06C \\ - \quad 4N \\ \hline L1 \end{array} \left| \begin{array}{l} L3 \\ 4L \end{array} \right. \Rightarrow C = ?$$

- A) 8 B) 7 C) 6 D) 4 E) 2

45.

$$\begin{array}{r} A \quad | \quad 7 \\ - \quad 5 \\ \hline B \quad | \quad 10 \\ - \quad 6 \\ \hline A \quad | \quad 35 \\ - \quad K \\ \hline \end{array} \Rightarrow K = ?$$

- A) 10 B) 11 C) 12 D) 13 E) 14

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 **YANITLAR / ANSWERS**

1	2	3	4	5	6	7	8	9
B	B	D	E	E	E	B	E	D
10	11	12	13	14	15	16	17	18
A	B	D	C	D	D	E	B	A
19	20	21	22	23	24	25	26	27
E	C	D	D	C	D	B	B	E
28	29	30	31	32	33	34	35	36
B	C	E	B	E	A	E	C	D
37	38	39	40	41	42	43	44	45
C	B	D	E	A	A	E	B	C

1. ve 4. sorularda, I. gruptaki kümelerin şekilleri harfleri ve sayıları birer rakamla, şekiller veya harfle gösterilecek II. gruptaki sayılar, şekiller veya kelimeler elde edilmiştir. Soru işaretileyile belirtilen kümelenin hangi sayıyla, şekiller veya kelimeyle gösterildiğini bulunuz.

In questions 1 and 4, the numbers, figures or words in group I stand for the sets of figures, letters or numbers, in group II, when each figure, numeral or letter has been coded with a specific numeral, figure or letter. Find the number, figure or word which corresponds to the set of the figures, numerals or numbers indicated by the question mark.

I.	II.
T A T	{ 5 1 7
D A T	{ 6 1 8
K A T	{ 4 1 7
Ç A T	{ 8 1 7
P A D	{ 7 1 7

$\Rightarrow TAP = ?$

- A) 714 B) 716 C) 717
D) 715 E) 718

I.	II.
Z İ K	{ Δ ■ \square
Z E K	{ \square * Δ
K A Z	{ \square ○ Δ
K İ Z	{ Δ * \square
K O Z	{ \square ● Δ

$\Rightarrow \bullet * = ?$

- A) AZİ B) AZO C) KAZ
D) AKİ E) AZA

3.

Δ *	\square	I.
\square Δ	*	II.
*	○ ●	
● *	○	
\square Δ	*	

$\Rightarrow BÖP = ?$

- A) $\square \Delta *$ B) $\bullet \Delta *$ C) $\bullet \square *$
D) $* \square \square$ E) $\bullet \square \bullet$

4.

I.	II.
C E Z M	{ 5 4 3 1
K E Z M	{ 6 7 3 5
E Z İ M	{ 7 3 1 5
A Z İ M	{ 8 7 3 5
M A Z İ	{ 4 3 1 5

$\Rightarrow MAZİ = ?$

- A) 5431 B) 6735 C) 7315
D) 8735 E) 4315

5.

- I. $4 \oplus 6 = 22$
II. $3 \oplus 7 = 24$
III. $9 \oplus 6 = 27$
IV. $8 \oplus 5 = ?$

Yukarıdaki dört eşitlikte \oplus işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \oplus remains unchanged. What does the question mark stand for in the fourth equation?

- A) 20 B) 21 C) 22 D) 23 E) 24

6. I. $14 \blacklozenge 8 = 36$

II. $6 \blacklozenge 12 = 24$

III. $13 \blacklozenge 17 = 43$

IV. $9 \blacklozenge 21 = ?$

Yukarıdaki dört eşitlikte \blacklozenge işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \blacklozenge remains unchanged. What does the question mark stand for in the fourth equation?

- A) 35 B) 36 C) 37 D) 38 E) 39

7. I. $a \blacksquare b = 2a + 3b$

II. $a \bullet b = a + 4b$

III. $a \blacktriangle b = 3a + b$

IV. $(4 \blacksquare 2) \blacktriangle (5 \bullet 2) = ?$

Yukarıdaki ilk üç eşitlikte \blacksquare , \bullet ve \blacktriangle işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare , \bullet and \blacktriangle are given. What does the question mark stand for in the fourth equation?

- A) 52 B) 53 C) 54 D) 55 E) 56

8. I. $a \circ b = 2a \blacksquare b$

II. $a \blacksquare b = a \Delta 3b$

III. $a \Delta b = a + b + 2$

IV. $(3 \circ 2) \blacksquare (2 \Delta 3) = ?$

Yukarıdaki ilk üç eşitlikte \circ , \blacksquare ve Δ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \circ , \blacksquare and Δ are given. What does the question mark stand for in the fourth equation?

- A) 37 B) 38 C) 39 D) 40 E) 41

9. I. $a^2 \square 3 \cdot b = a + b$

II. $a \bullet 2 \cdot b = a \times b$

III. $a \blacksquare b^3 = 3a - b$

IV. $(16 \square 9) \bullet (5 \blacksquare 27) = ?$

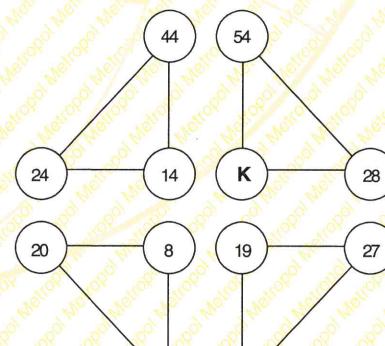
Yukarıdaki ilk üç eşitlikte \square , \bullet ve \blacksquare işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \square , \bullet and \blacksquare are given. What does the question mark stand for in the fourth equation?

- A) 27 B) 32 C) 36 D) 40 E) 42

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10.



$\Rightarrow K = ?; L = ?$

A) 19; 44

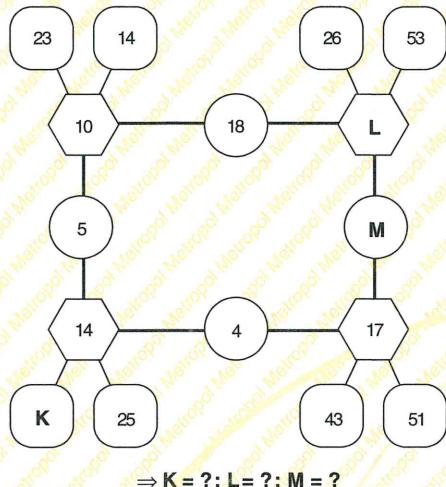
B) 18; 42

C) 18; 44

D) 17; 40

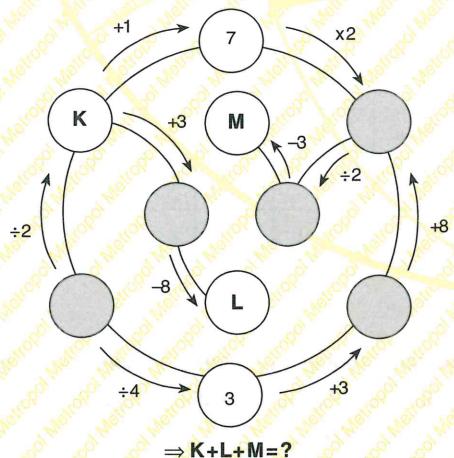
E) 19; 42

11.



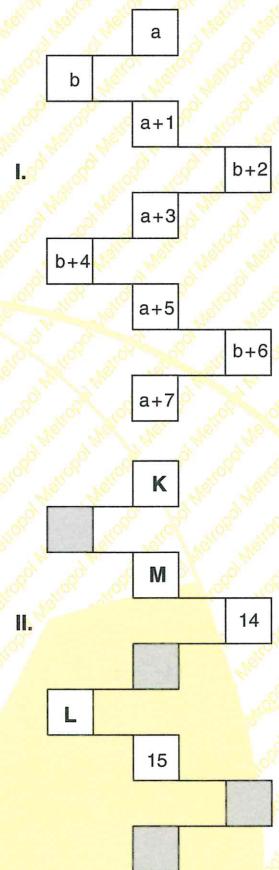
- | K | L | M |
|-------|----|----|
| A) 14 | 27 | 9 |
| B) 12 | 26 | 10 |
| C) 12 | 26 | 9 |
| D) 13 | 29 | 11 |
| E) 14 | 27 | 11 |

12.



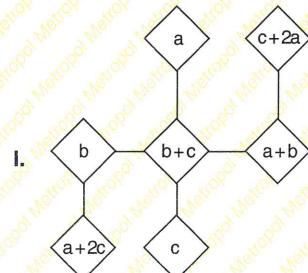
- A) 10 B) 11 C) 12 D) 13 E) 14

13.

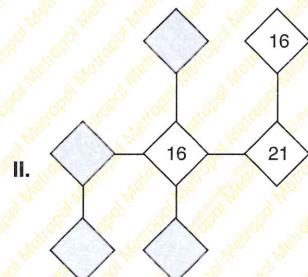


- A) 35 B) 36 C) 37 D) 38 E) 39

14.



I.



$$\Rightarrow b = ?$$

- A) 2 B) 7 C) 9 D) 14 E) 17

15.

+	a	b	c
a		13	
b			9
c	12		

$$\Rightarrow a \cdot b - c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $a \cdot b - c$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of $a \cdot b - c$?

- A) 28 B) 32 C) 36 D) 48 E) 64

16.

+	a	b	c
a		14	
b			
c		72	

$$\Rightarrow c = ?$$

x	a	b	c
a			54
b			
c		72	

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral. What is the value of c?

- A) 3 B) 6 C) 9 D) 12 E) 16

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17.

+	2	3	4
a			
b	a		
c		b	

$$\Rightarrow b = ?$$

x	6	9	12
a			
b			
c			

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 6 B) 8 C) 9 D) 12 E) 15

18.

+	a	b	c	d
a		3+c		
b			4+d	
c				5+a
d				

$$\Rightarrow c - 2d = ?$$

Yukarıdaki toplama tablosunda a, b, c ve d harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c – 2d kaçtır?

In the summation table above, the letters a, b, c and d each stand for a specific numeral. What is the value of $c - 2d$?

- A) 16 B) 8 C) –4 D) –8 E) –16

19.

+	a	b
a	x	
b	z	y

$$\begin{aligned}x + y - 2z - c^2 &= 0 \\ \Rightarrow c &=?\end{aligned}$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of c ?

- A) 0 B) 1 C) 2 D) 3 E) 4

20.

●	a	b	c	d	e
a	a	b	c	d	e
b	b	a	d	c	e
c	c	d	a	b	d
d	d	c	b	a	e
e	e	e	d	e	e

$$\begin{aligned}e \bullet (d \bullet x) &= d \\ \Rightarrow x &=?\end{aligned}$$

Yukarıdaki tabloda ● işleminin kuralı verilmiştir. Buna göre, x kaçtır?

According to the rule of ● operation established in the table above, what is the value of x ?

- A) a B) b C) c D) d E) e

21.

▲	a	b	c
a	a	e	d
b	e	b	f
c	d	f	c

$$\Rightarrow ((a \blacktriangle b) \bullet d) \blacktriangle ((e \bullet f)) = ?$$

Yukarıdaki tablolarda ▲ ve ● işlemlerinin kuralları verilmiştir. Buna göre, $((a \blacktriangle b) \bullet d) \blacktriangle ((e \bullet f))$ işleminin sonucu nedir?

According to the rules of ▲ and ● operations established in the table above, what is the value of $((a \blacktriangle b) \bullet d) \blacktriangle ((e \bullet f))$?

- A) a B) b C) c D) d E) e

22.

●	1	2	3
4	7	5	3
5	2	1	4
6	6	9	8

▲	5	7	3
2	3	5	1
1	7	9	6
4	2	4	8

$$\Rightarrow ((1 \bullet 5) \Delta 7) \bullet (4 \Delta 5) = ?$$

Yukarıdaki tablolarda ▲ ve ● işlemlerinin kuralları verilmiş tir. Buna göre, $((1 \bullet 5) \Delta 7) \bullet (4 \Delta 5)$ işleminin sonucu kaçtır?

According to the rules of ▲ and ● operations established in the table above, what is the value of $((1 \bullet 5) \Delta 7) \bullet (4 \Delta 5)$?

- A) 1 B) 3 C) 5 D) 7 E) 9

23.

▲	a	b	c	d
I	a	b	c	d
II	b	c		
III	c	K	a	
IV	d		L	c

$$\Rightarrow (K, L) = (?, ?)$$

Yukarıdaki tabloda ▲ işleminin kuralı verilmiştir. Buna göre, (K, L) aşağıdakilerden hangisidir?

According to the rule of ▲ operation established in the table above, what is the value of (K, L)?

- A) b, c B) d, b C) c, d
D) b, d E) c, b

24.

I	K	
		L
		M

$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?

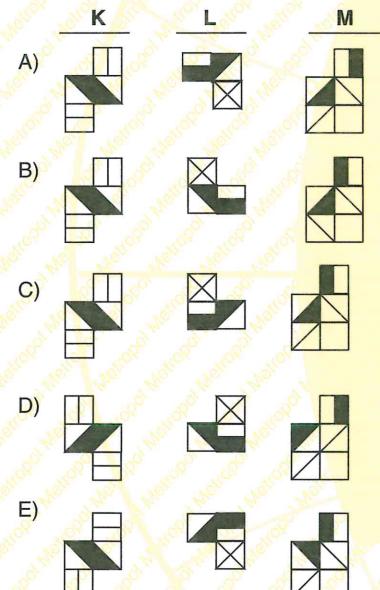
	K	L	M
A)			
B)			
C)			
D)			
E)			

25.

	I	II	III
K			
M			
⇒ K = ?; L = ?; M = ?			

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



26.

⇒ K = ?; L = ?

Yukarıdaki tabloda K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M stand for in the table above?

- | K | L |
|----|----|
| A) | B) |
| C) | D) |
| E) | |

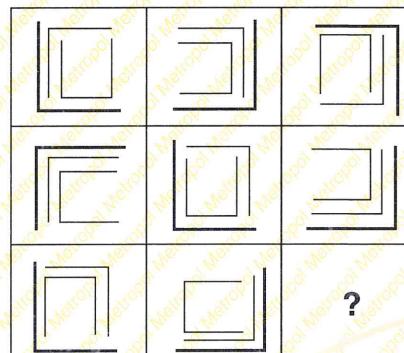
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27.

		?

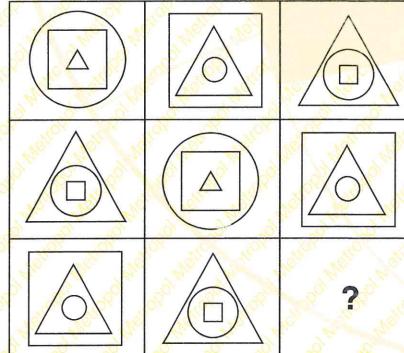
- | | | |
|----|----|----|
| A) | B) | C) |
| D) | E) | |

28.



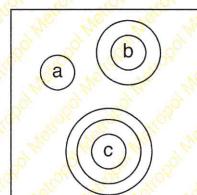
- A)
- B)
- C)
- D)
- E)

29.

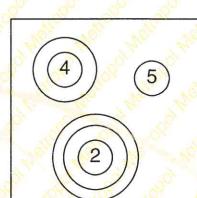


- A)
- B)
- C)
- D)
- E)

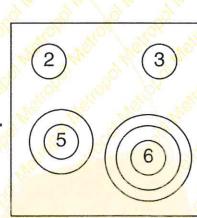
30.



$$\Rightarrow (a0 + b00 + c000)$$



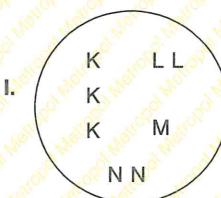
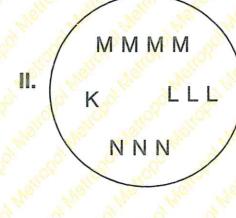
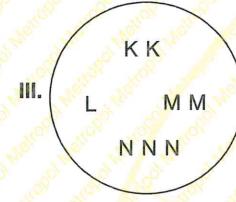
$$\Rightarrow 2450$$



$$\Rightarrow ?$$

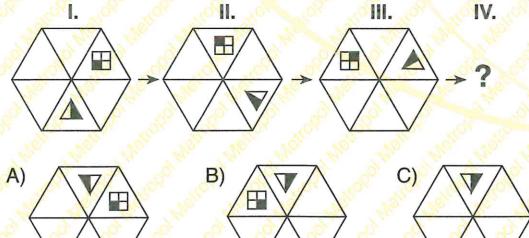
- A) 660
- B) 1150
- C) 6100
- D) 6550
- E) 11050

31.

 $\Rightarrow 1; 2; 3; 2$  $\Rightarrow 4; 3; 1; 3$  $\Rightarrow ?; ?; ?; ?$

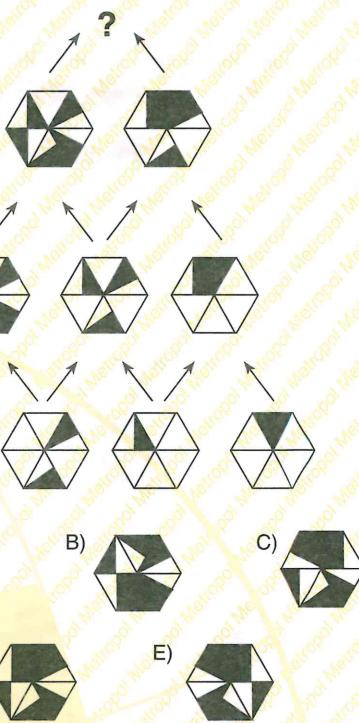
- A) 2; 1; 2; 3
B) 2; 2; 3; 1
C) 2; 1; 2; 2
D) 3; 2; 1; 2
E) 3; 1; 2; 2

32.



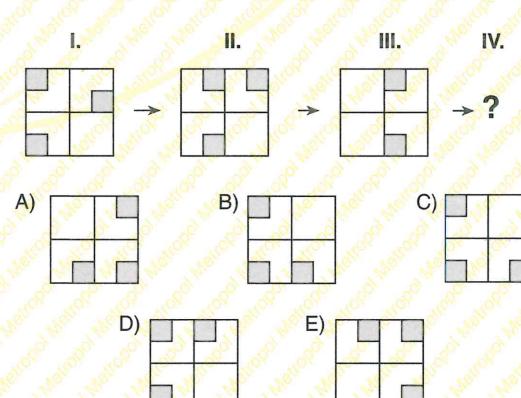
- A)
B)
C)
D)
E)

33.



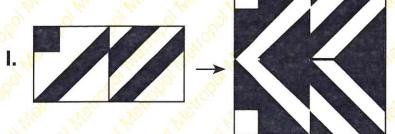
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34.



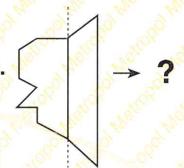
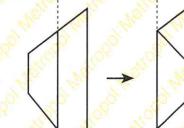
- A)
B)
C)
D)
E)

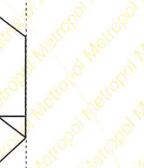
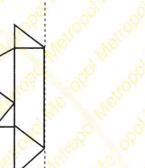
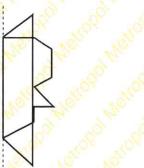
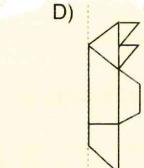
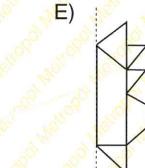
35.



- A) 
- B) 
- C) 
- D) 
- E) 

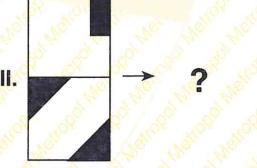
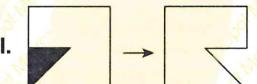
36.

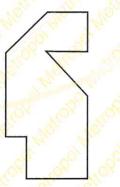
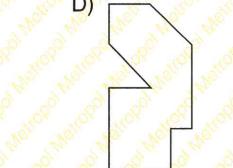


- A) 
- B) 
- C) 
- D) 
- E) 

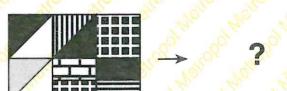
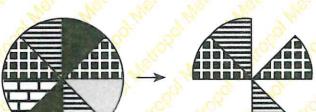
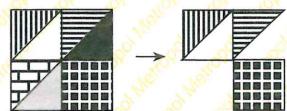
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37.

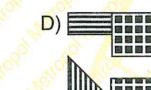
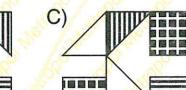
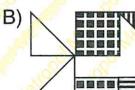
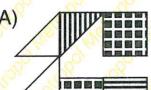


- A) 
- B) 
- C) 
- D) 
- E) 

38.

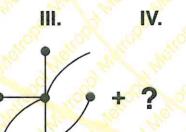
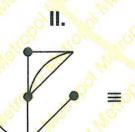
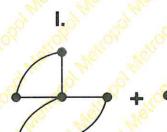


?

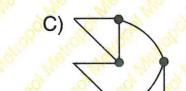


?

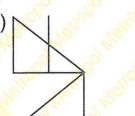
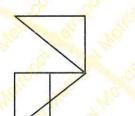
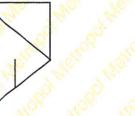
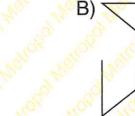
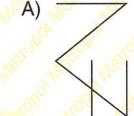
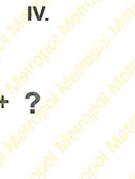
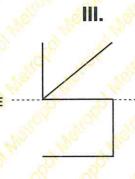
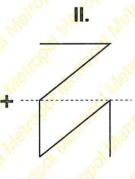
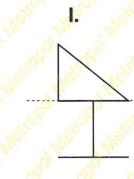
39.



?

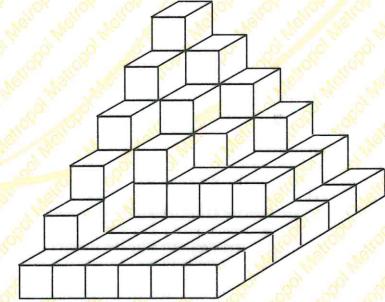


40.



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41.



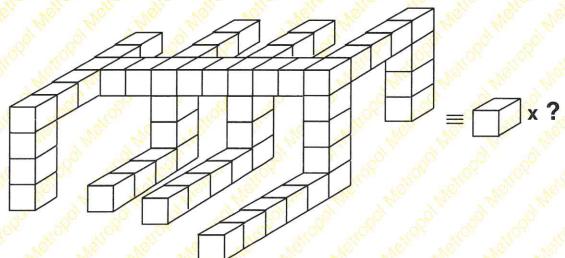
$$\times \text{Cube} = ?$$

Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 72 B) 73 C) 74 D) 75 E) 76

42.

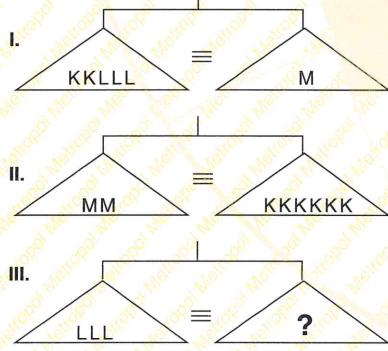


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 53 B) 52 C) 51 D) 50 E) 49

43.

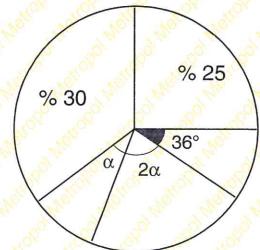


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) K B) KK C) KKK
D) KKKK E) KKKKK

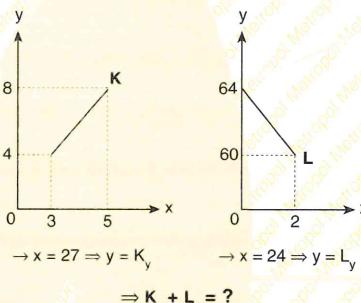
44.



$$\Rightarrow \alpha = ?$$

- A) 40 B) 42 C) 44 D) 46 E) 48

45.



$$\Rightarrow K_y + L_y = ?$$

- A) 62 B) 64 C) 66 D) 68 E) 70

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
B	A	E	A	D	E	D	A	E
10	11	12	13	14	15	16	17	18
E	E	B	C	D	C	C	A	C
19	20	21	22	23	24	25	26	27
A	B	E	A	B	E	C	E	C
28	29	30	31	32	33	34	35	36
D	C	D	A	E	D	E	C	C
37	38	39	40	41	42	43	44	45
E	A	D	B	B	A	A	B	D

- $$\text{II. } 4 \bullet 3 = ?$$

Yukarıdaki iki eşitlikte ● işaretinin görevi aynıdır. Buna göre, ikinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of ● remains unchanged.

What does the question mark stand for in the second equation?

- A) 80 B) 97 C) 101 D) 132 E) 145

2. I. $a \bullet b = a^2 + b$
 II. $a \blacktriangle b = a \cdot b + b$
 III. $6 \bullet (4 \blacktriangle 3) = ?$

Yukarıdaki ilk iki eşitlikte ● ve ▲ işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of ● and ▲ are given. What does the question mark stand for in the third equation?

- A) 48 B) 49 C) 50 D) 51 E) 52

3. I. $a \circ b = 2 \cdot (a \blacklozenge b)$
 II. $a \blacklozenge b = 5 \cdot (a + b)$
 III. $7 \circ 4 = ?$

Yukarıdaki ilk iki eşitlikte ○ ve ◆ işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \circ and \diamond are given. What does the question mark stand for in the third equation?

- A) 60 B) 90 C) 110 D) 220 E) 280

4. I. $a \heartsuit b = (4a + 3b) - (3a + 4b)$
 II. $6 \heartsuit 4 = ?$

Yukarıdaki iki eşitlikte ❤ işaretinin görevi aynıdır. Buna göre, ikinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of remains unchanged

What does the question mark stand for in the second equation?

- A) 1 B) 2 C) 4 D) 6 E) 8

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5. ve 8. sorularda, I. gruptaki kümelerin şekilleri harfleri ve sayıları birer rakamla, şekiller veya harfle gösterile-rek II. gruptaki sayılar, şekiller veya kelimeler elde edil-miştir. Soru işaretileyi belirtilen kümenin hangi sayıyla, şekiller veya kelimeyle gösterildiğini bulunuz.

In questions 5 and 8, the numbers, figures or words in group II stand for the sets of figures, letters or numbers, in group I, when each figure, numeral or letter has been coded with a specific numeral, figure or letter. Find the number, figure or word which corresponds to the set of the figures, numerals or numbers indicated by the question mark.

- | | | | | | | | |
|----|---|---|---|---|---|---|---|
| 5. | 1 | 5 | 7 | 9 | } | ● | ▲ |
| | 3 | 9 | 7 | 5 | | ★ | * |
| | 4 | 6 | 8 | 2 | | ✖ | ■ |
| | 2 | 8 | 6 | 9 | | ■ | + |
| | 3 | 4 | 5 | 9 | | ○ | □ |

⇒ 2861 = ?

- A) $\square \Delta * \bullet$ B) $\bullet + \blacktriangle \circ$ C) $\Delta \star + \circ$
 D) $\bullet \blacktriangle + \circ$ E) $\star \blacksquare \square *$

6.

I.	II.
C A K I	■ □ △ ○ △
I R A K	○ □ △ ■ *
I R A N	▲ ○ △ ■
N A R A	* ○ △ □
K I R A	□ ▲ ○ △

$$\Rightarrow \text{KıRA} = ?$$

- A) ■ □ △ ○ △ B) □ △ ○ △ C) * ○ △ □
D) ○ □ △ ■ * E) □ ▲ ○ △

7.

I.	II.
D O S T	5 1 3 4
P A S T	7 1 3 4
K O S T	5 2 3 4
H O S T	8 1 3 4
K A S T	9 2 3 4

$$\Rightarrow \text{PAST} = ?$$

- A) 5134 B) 7134 C) 5234
D) 8134 E) 9234

8.

I.	II.
△ ○ ○ ○ ○	G A S P
△ ▲ ▲ □	H O O K
● ▲ * □	H A A P
□ ▲ * ▲	K A S A
○ ▲ * ▲	P A S A

$$\Rightarrow \text{GASK} = ?$$

- A) ● ▲ * □ B) ● ▲ □ ○ ○ C) ▲ ● □ ○ ○
D) □ ▲ * ○ ○ E) ● ▲ * ○ ○

9.

+	a	b	c
a		2-c	
b			
c		3-a	

$$\Rightarrow \frac{c}{b} = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $\frac{c}{b}$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of $\frac{c}{b}$?

- A) $\frac{2}{3}$ B) $\frac{3}{4}$ C) $\frac{4}{5}$ D) $\frac{4}{3}$ E) $\frac{5}{4}$

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10.

+	a	b	c
a			9
b	19		
c		2-a	

$$\Rightarrow a = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of a?

- A) 6 B) 7 C) 8 D) 9 E) 10

11.

x	a	b	c
a		54	
b			
c	36	24	

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + b + c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of

$$a + b + c ?$$

- A) 17 B) 18 C) 19 D) 20 E) 21

12.

x	a	b	c
a	c		
b			
c	b		

$$\Rightarrow c = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral. What is the value of c ?

- A) 2 B) 4 C) 16 D) 32 E) 64

13.

+	a	b	c
a			10
b			

$$\Rightarrow c = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, c kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral.

What is the value of c ?

- A) 3 B) 4 C) 7 D) 13 E) 16

14.

+	a	b	c
a			10
b			

$$\Rightarrow b = ?$$

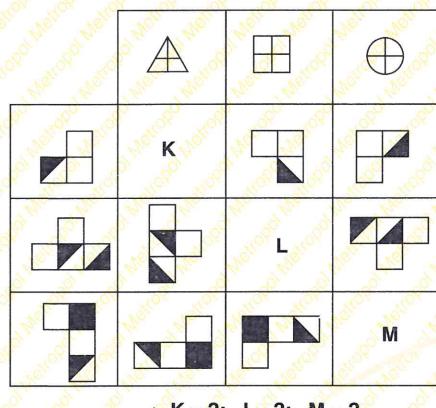
Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral.

What is the value of b ?

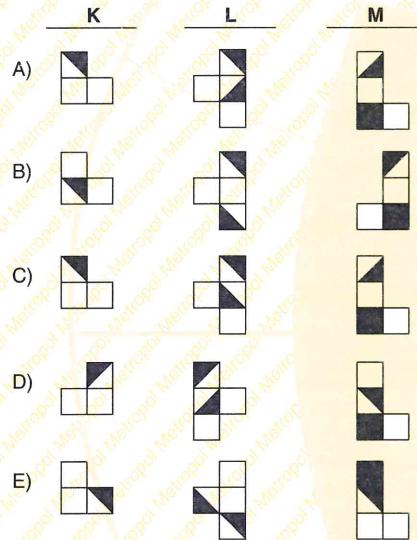
- A) 2 B) 4 C) 8 D) 16 E) 32

15.

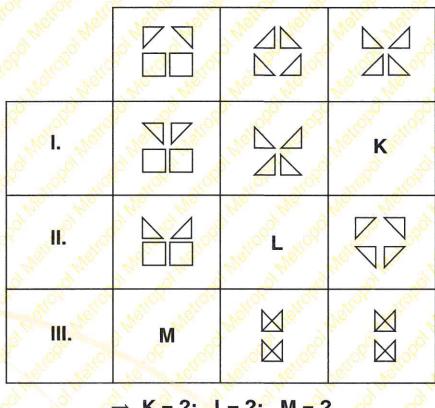


Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?

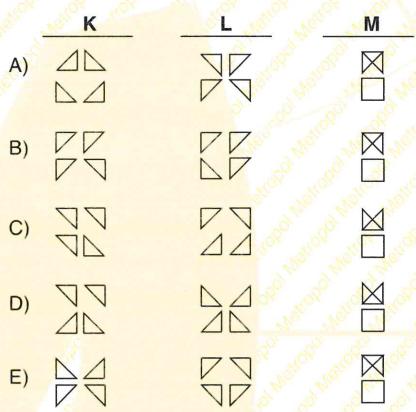


16.



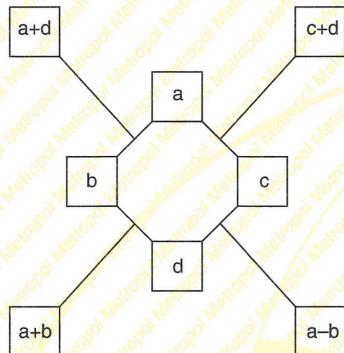
Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



17. ve 18. soruları aşağıdaki şeke göre cevaplayıniz.
Answer questions 17 – 18 in accordance with the figure given below.

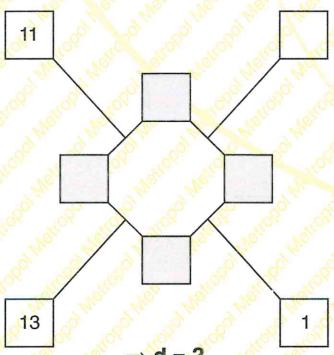
Her soru birbirinden bağımsız olarak cevaplanacaktır.
Each question is to be answered independently.



Yukarıdaki şekil a, b, c ve d harfleriyle gösterilen dört pozitif tamsayıyı içeren bazı işlemlere göre düzenlenmiştir. Harflerin gösterdiği sayılar her soruda farklı olabilir fakat, bunlarla yapılacak işlemler her soruda aynıdır.

The figure above has been organized according to various operations using four positive integers represented by the letters, a, b, c and d. The integers represented by the letters may change from question to question, but the operations to be done remain the same.

17.

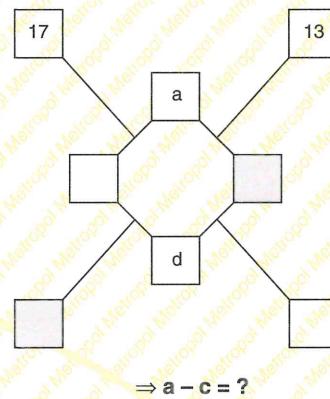


Yukarıda verilen şeke göre d kaçtır?

According to the figure above, what is d?

- A) 2 B) 3 C) 4 D) 5 E) 6

18.



$$\Rightarrow a - c = ?$$

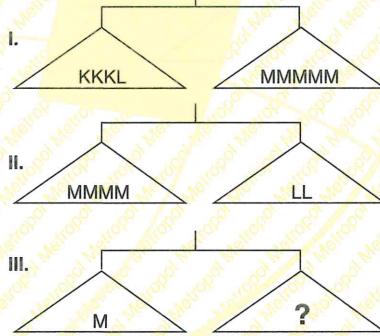
Yukarıda verilen şeke göre a – c işleminin sonucu kaçtır?

According to the figure above, what is a – c?

- A) 2 B) 3 C) 4 D) 5 E) 6

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19.

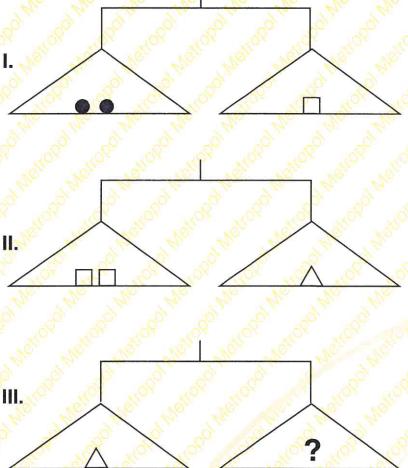


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen kütleler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) K B) KK C) LL
D) KL E) KKL

20.

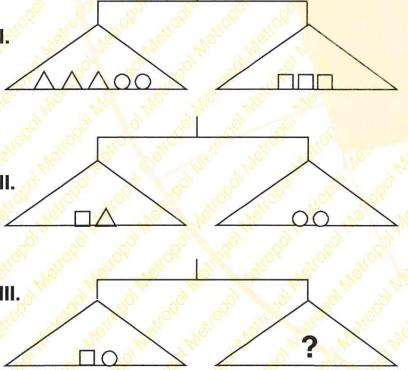


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) ● □ B) □ ● □ C) ● ● □
D) ● ● E) ● ● ●

21.

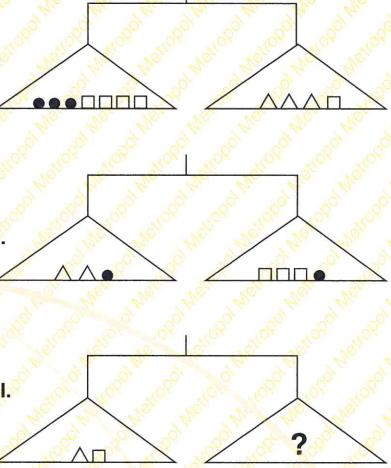


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) △△○ B) △○ C) □△
D) □□ E) △△

22.



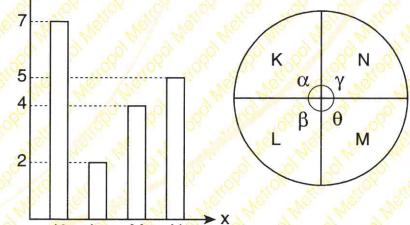
I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) ●●●□ B) ●●● C) ●●●△
D) ●●●● E) ●□

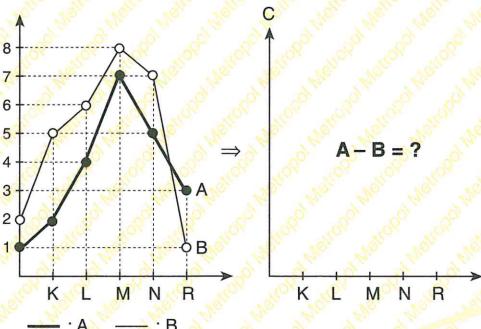
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23.

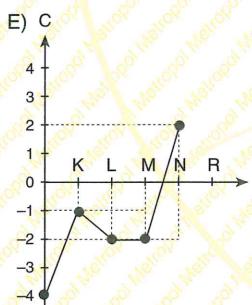
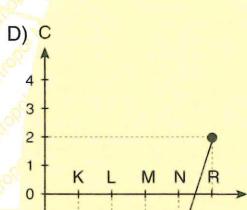
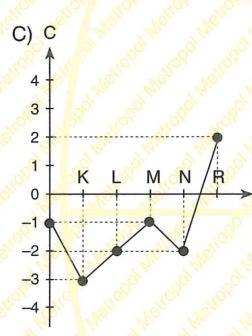
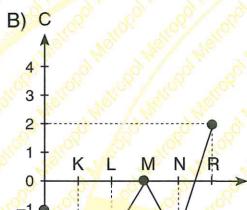
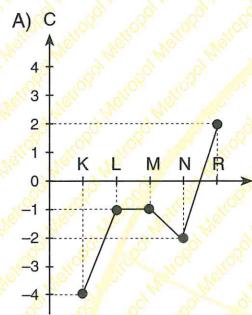


- | α | β | θ | γ |
|----------|---------|----------|----------|
| A) 120 | 60 | 100 | 80 |
| B) 120 | 80 | 90 | 70 |
| C) 140 | 60 | 80 | 100 |
| D) 130 | 80 | 100 | 50 |
| E) 140 | 40 | 80 | 100 |

24.

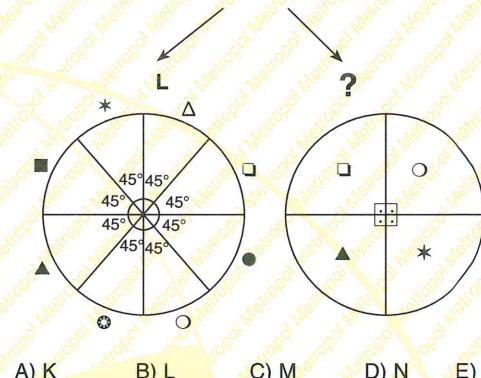


$$A - B = ?$$



25.

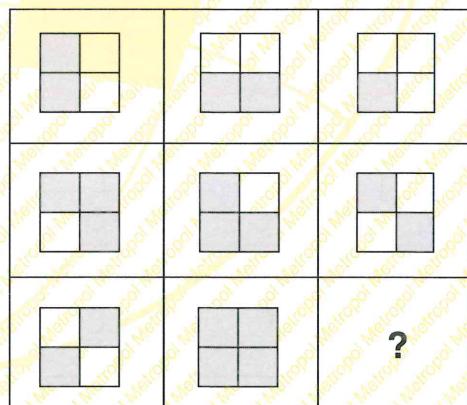
K	□	○	□	*	*	*	▲	■
L	△	□	●	○	◎	▲	■	*
M	■	*	○	□	◎	○	○	○
N	○	○	*	*	▲	▲	▲	○
R	□	□	○	○	*	*	▲	▲



- A) K B) L C) M D) N E) R

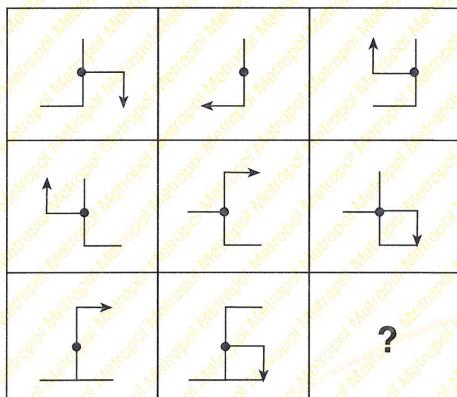
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26.



- A) B) C)
 D) E)

27.



A)



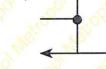
B)



C)



D)



E)

28.

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CC	CCC	CCCC
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]]]]]]]	CC
C	CC	CCC
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]]	CCC	CCCC

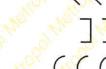
A)



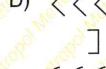
B)



C)

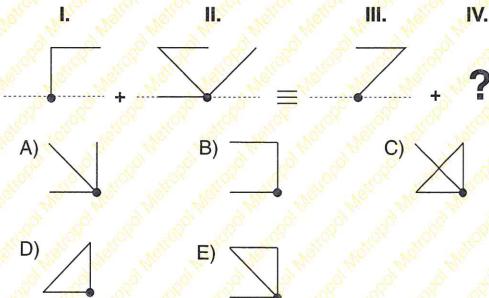


D)

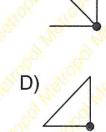


E)

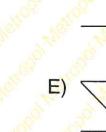
29.



A)



B)



C)



D)

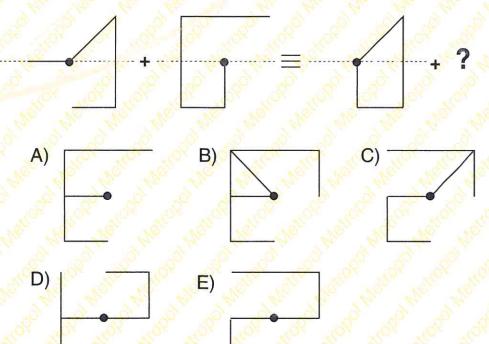


E)



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30.



A)



B)



C)



D)



E)

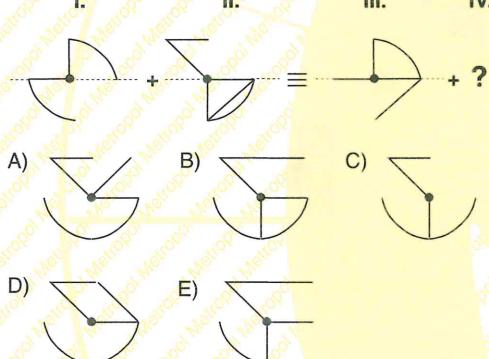


31.



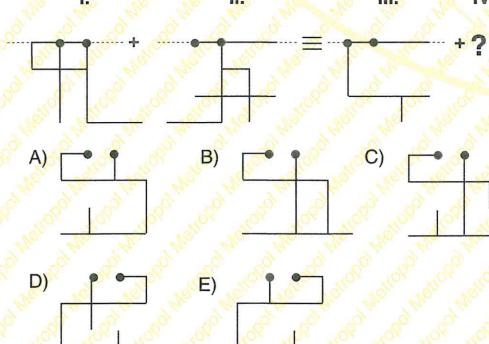
- A) B) C) D) E)

32.



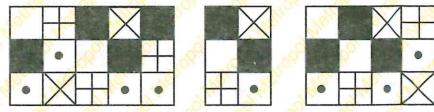
- A) B) C) D) E)

33.



- A) B) C) D) E)

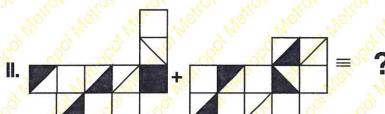
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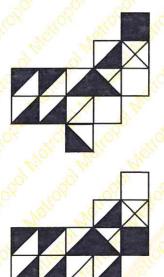
- A) B) C) D) E)

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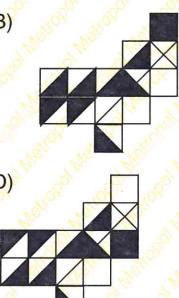
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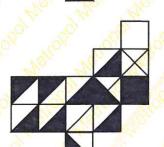
A)



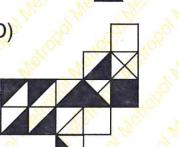
B)



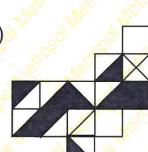
C)



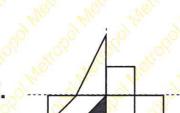
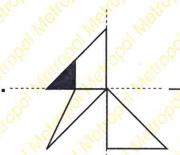
D)



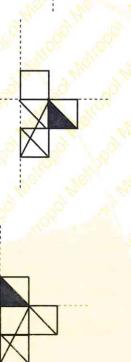
E)



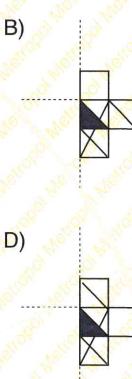
37.



A)



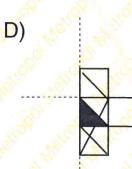
B)



C)



D)



E)



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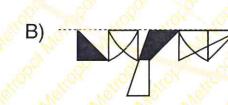
36.



A)



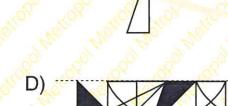
B)



C)



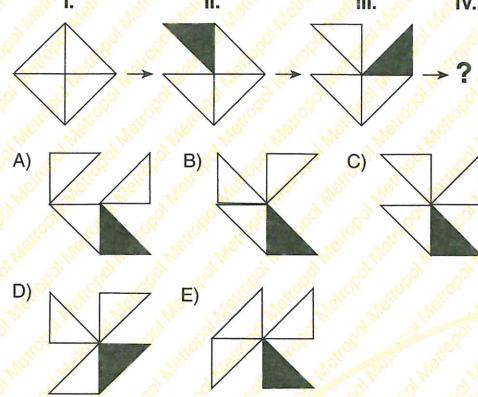
D)



E)

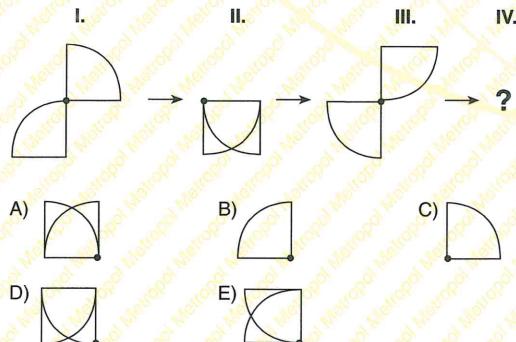


38.



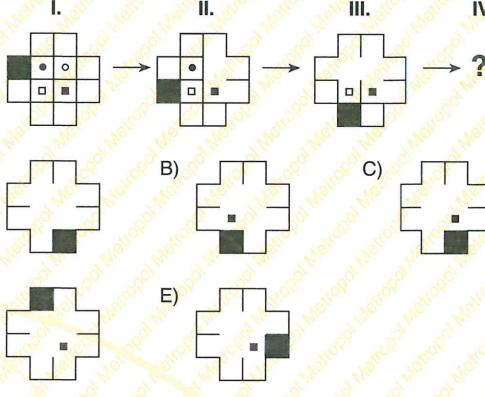
- A) B) C) D) E)

39.



- A) B) C) D) E)

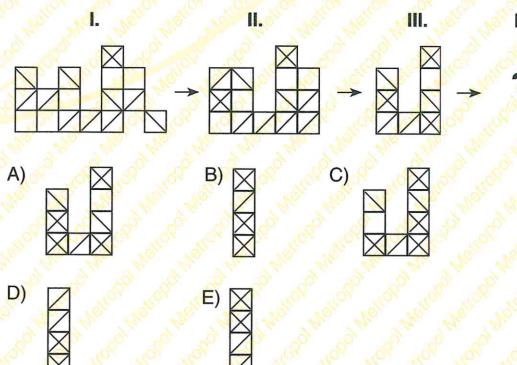
40.



- A) B) C) D) E)

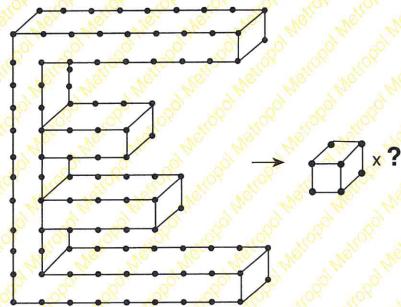
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41.



- A) B) C) D) E)

42.

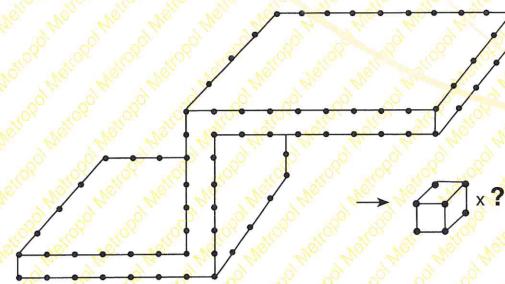


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 30 B) 31 C) 32 D) 33 E) 34

43.

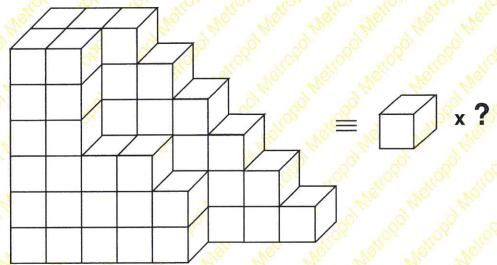


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 80 B) 82 C) 84 D) 86 E) 88

44.

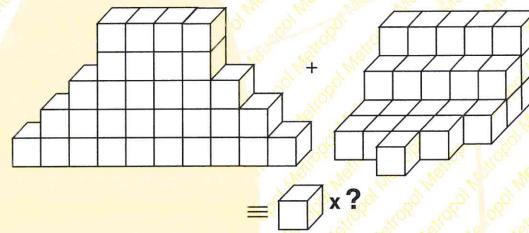


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in the figure above?

- A) 53 B) 54 C) 55 D) 56 E) 57

45.



Yukarıdaki şekilde kaç tane küp vardır?

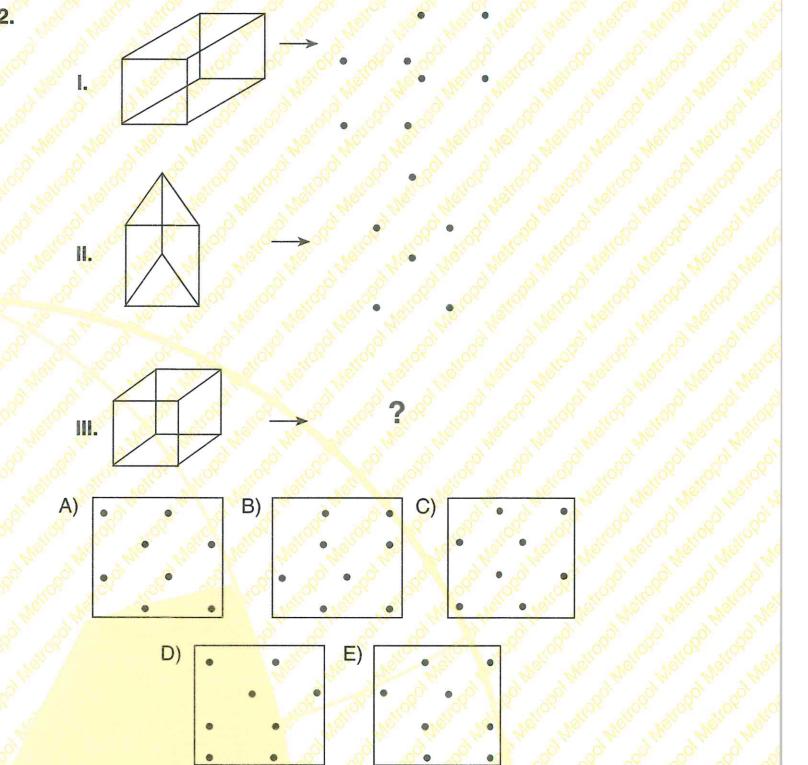
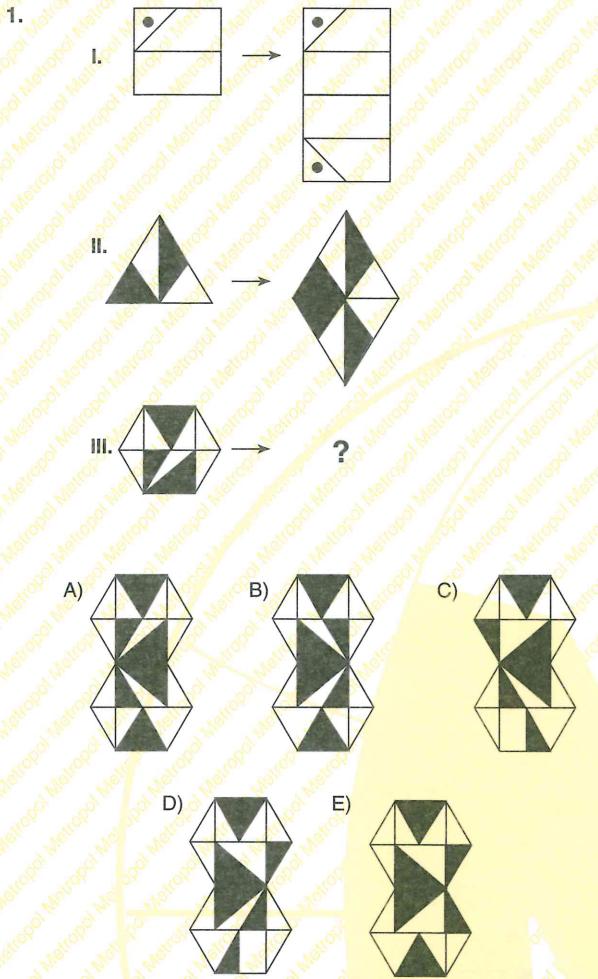
How many cubes are there in the figure above?

- A) 63 B) 64 C) 65 D) 66 E) 67

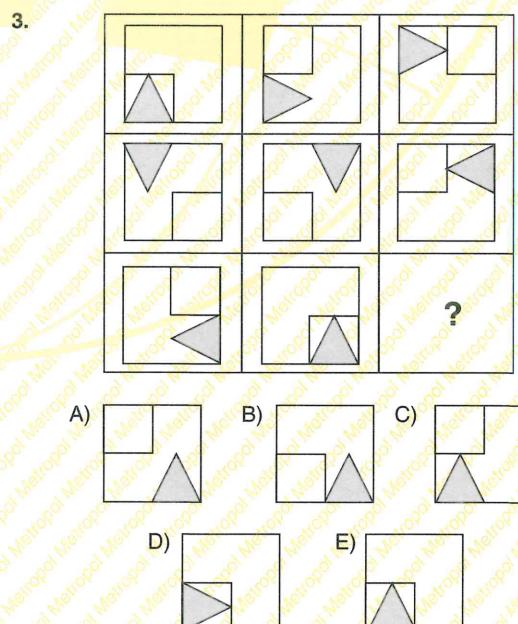


YANITLAR / ANSWERS

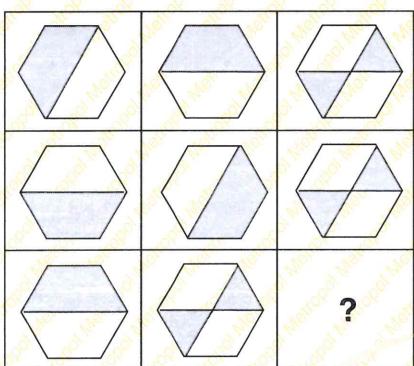
1	2	3	4	5	6	7	8	9
E	D	C	B	D	E	E	E	C
10	11	12	13	14	15	16	17	18
B	C	C	A	B	C	A	C	C
19	20	21	22	23	24	25	26	27
A	C	A	A	E	C	E	D	B
28	29	30	31	32	33	34	35	36
D	E	A	E	C	C	D	D	C
37	38	39	40	41	42	43	44	45
B	C	A	C	B	C	C	A	E



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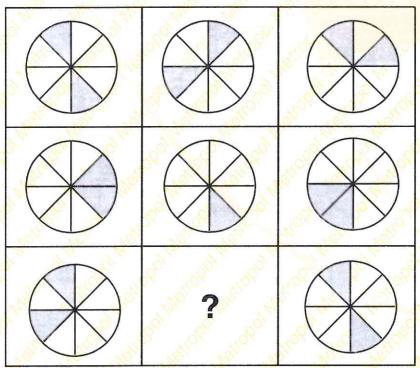


4.



- A) B) C) D) E)

5.



- A) B) C) D) E)

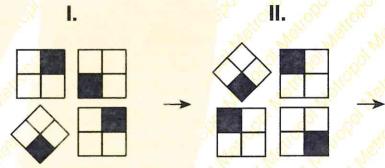
6.



- A) B) C) D) E)

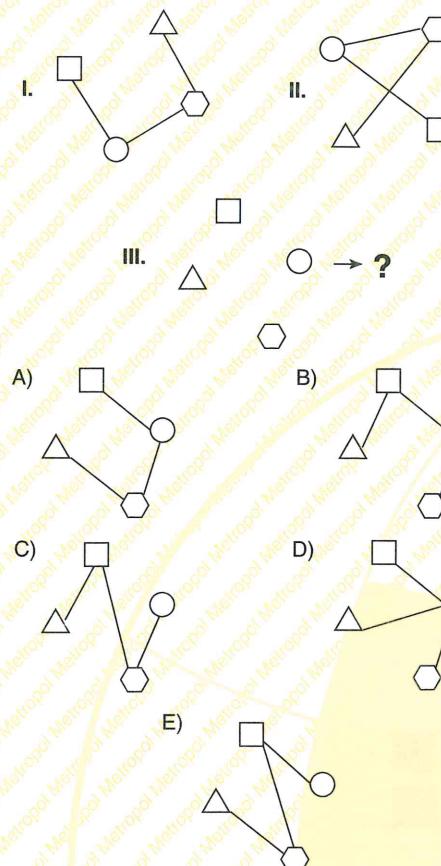
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7.

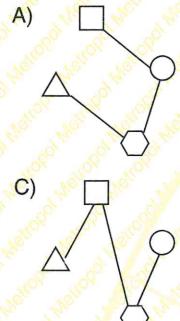


- A) B) C) D) E)

8.



III.
○ → ?



B)



C)



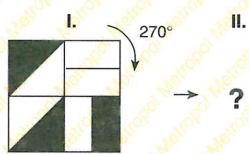
D)



E)



9.

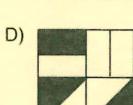
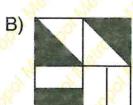


II.

?

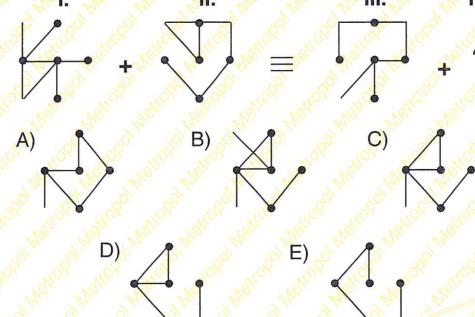
Yukarıdaki şekil 270° döndüründüğünde aşağıdaki şekillerden hangisi oluşur?

When the figure above rotates 270°, which of the following figure is formed?

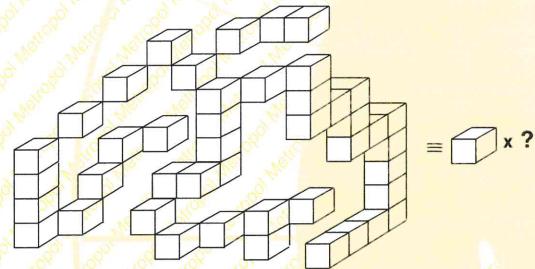


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10.



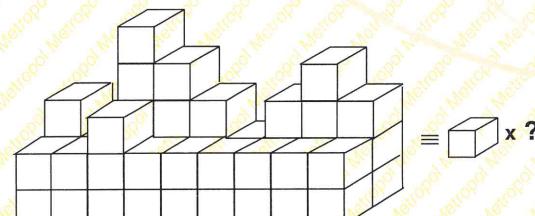
11.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are there in the figure above?

- A) 40 B) 41 C) 42 D) 43 E) 44

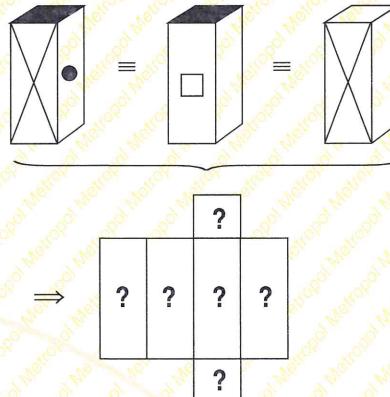
12.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are there in the figure above?

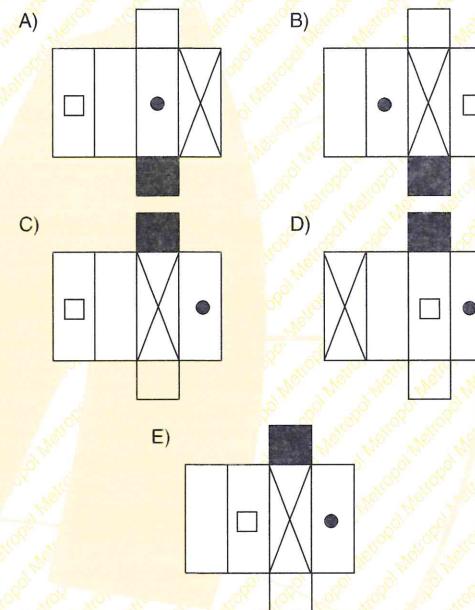
- A) 47 B) 48 C) 49 D) 50 E) 51

13.

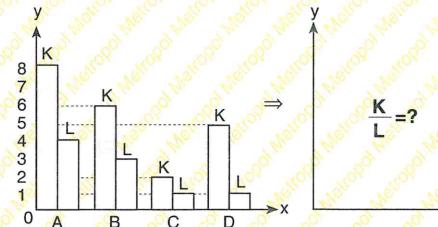


Yukarıdaki şekiller aynı nesneyi göstermektedir. Bu nesnenin açılmış hali aşağıdakilerden hangisidir?

The figures above represent the same object. Which of the figures below represent the unfolded form of this object?



14.



A)

B)

C)

D)

E)

18.- 21. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretleri ile belirtilen harf ya da işlemin değerini bulunuz.

In questions 18 – 21 each letter represents a number different from zero and each other in the given operations. Find the value of letter or operation indicated by the question mark.

$$\begin{array}{r} ABC \\ + EBD \\ \hline F 37 \end{array} \Rightarrow C \cdot D = ?$$

- A) 6 B) 10 C) 42 D) 56 E) 72

$$\begin{array}{r} K 7 L \\ + M M L \\ \hline 6 0 M \end{array} \Rightarrow K + L + M = ?$$

- A) 8 B) 9 C) 10 D) 11 E) 12

$$\begin{array}{r} 2 K 3 \\ \times \quad L 3 \\ \hline \dots \dots \end{array} \Rightarrow M = ?$$

- A) 2 B) 3 C) 4 D) 5 E) 6

$$\begin{array}{r} K \mid L \\ \hline 1 \quad M \end{array} \quad \begin{array}{r} K-2 \mid L \\ \hline 3 \quad 1 \end{array} \Rightarrow K = ?$$

- A) 9 B) 8 C) 7 D) 6 E) 5

$$\begin{array}{r} K+3 \mid L \\ \hline 4 \quad M \end{array} \quad \begin{array}{r} M \mid 6 \\ \hline 2 \quad L \end{array} \Rightarrow K = ?$$

- A) 89 B) 86 C) 82 D) 79 E) 76

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I. $17 \square 21 = 5$

II. $43 \square 25 = 2$

III. $84 \square 62 = 20$

IV. $76 \square 57 = ?$

Yukarıdaki dört eşitlikte \square işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdaki lerden hangisi gelmelidir?

In the equations above, the function of \square remains unchanged. What does the question mark stand for in the fourth equation?

- A) 7 B) 11 C) 13 D) 17 E) 21

24. I. $18 \blacklozenge 16 = 43$
 II. $72 \blacklozenge 21 = 39$
 III. $48 \blacklozenge 37 = 58$
 IV. $37 \blacklozenge 56 = ?$

Yukarıdaki dört eşitlikte \blacklozenge işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \blacklozenge remains unchanged. What does the question mark stand for in the fourth equation?

- A) 12 B) 19 C) 21 D) 39 E) 42

25. I. $a^2 \blacksquare b = a + b - 2$
 II. $a \bullet b^3 = a^b + 1$
 III. $(4 \blacksquare 3) \bullet 27 = ?$

Yukarıdaki ilk iki eşitlikte \blacksquare ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare and \bullet are given. What does the question mark stand for in the third equation?

- A) 25 B) 26 C) 27 D) 28 E) 29

26. I. $\frac{1}{a} \blacksquare \frac{1}{b} = 12a + 12b$
 II. $(a-b) \bullet (a+b) = a^b + b^2$
 III. $(3 \blacksquare 6) \bullet 5 = ?$

Yukarıdaki ilk iki eşitlikte \blacksquare ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare and \bullet are given. What does the question mark stand for in the third equation?

- A) 15 B) 17 C) 25 D) 31 E) 36

27. I. $(a \blacktriangle b) = a + b - 2(a - b)$
 II. $(a \square b) = a + (a \blacktriangle b)$
 III. $(4 \square 7) = ?$

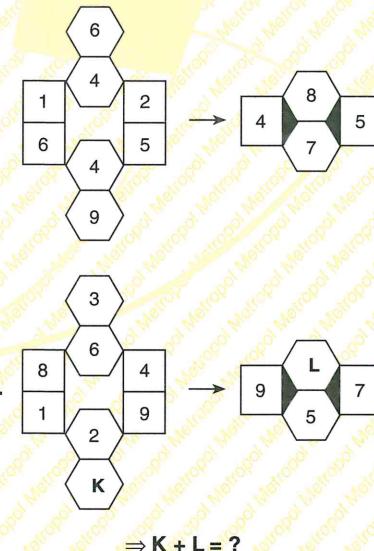
Yukarıdaki ilk iki eşitlikte \blacktriangle ve \square işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacktriangle and \square are given. What does the question mark stand for in the third equation?

- A) 21 B) 22 C) 23 D) 24 E) 25

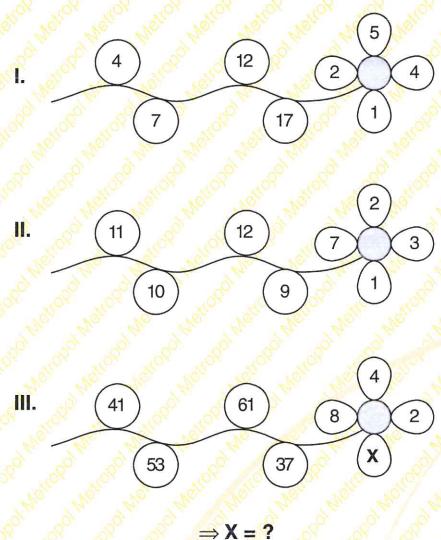
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28.



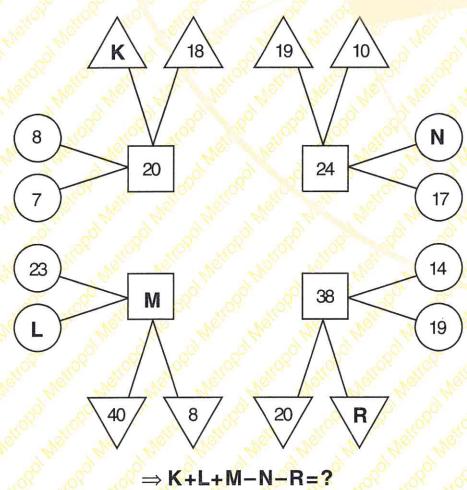
- A) 8 B) 9 C) 10 D) 11 E) 12

29.



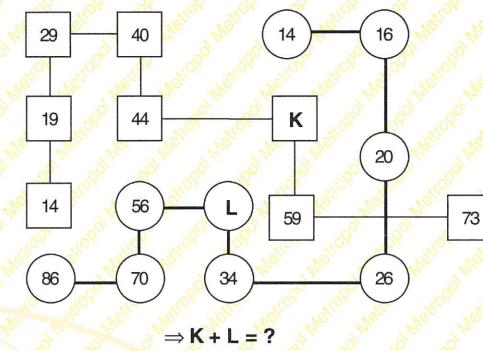
- A) 2 B) 3 C) 4 D) 5 E) 6

30.



- A) 36 B) 38 C) 40 D) 42 E) 44

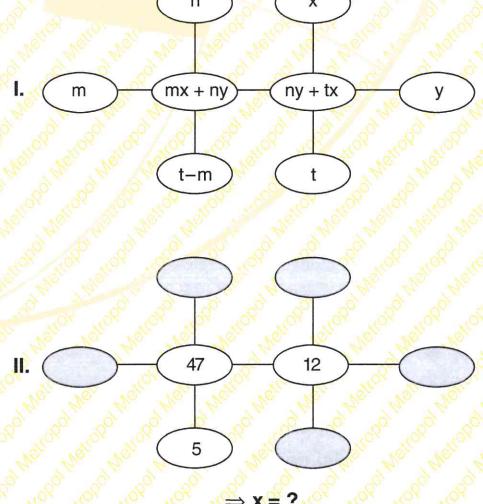
31.



- A) 90 B) 92 C) 94 D) 96 E) 98

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32.



- A) -7 B) -6 C) -5 D) -4 E) -3

33.

+	a	b	c
a			15
b	2c-1		
c		a+14	

$$\Rightarrow a + b - c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre,

$a + b - c$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of

$$a + b - c?$$

- A) 6 B) 7 C) 8 D) 9 E) 10

34.

x	a	b	c
a			6b
b	4c		
c		8a	

$$\Rightarrow a^2 + b^2 + c^2 = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre

$a^2 + b^2 + c^2$ kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific number. What is the value of

$$a^2 + b^2 + c^2?$$

- A) 100 B) 104 C) 108 D) 112 E) 116

35.

+	a	b	c
a			d^2
b			
c			

$$\Rightarrow d = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b, c ve d harfleri belli birer sayının yerine kullanılmıştır. Buna göre, d kaçtır?

In the summation and multiplication tables above, the letters a, b, c ve d each stand for a specific numeral. What is the value of d?

- A) 3 B) 4 C) 5 D) 7 E) 9

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36.

x	a	b	c
a			12
b			15
c	20		

$$\Rightarrow a \cdot b \cdot c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre $a \cdot b \cdot c$ kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific number. What is the value of $a \cdot b \cdot c$?

- A) 42 B) 56 C) 60 D) 72 E) 96

Deneme Sınavı 5

37.

+	a	b	c
a		3c-27	
b			3a+2b-23
c	b+15		

$$\Rightarrow b = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 8 B) 10 C) 12 D) 14 E) 16

38.

96	87	54
■	K	15
▲	54	L
●	3	M

$$\Rightarrow K + L + M = ?$$

Yukarıdaki tabloda K + L + M kaçtır?

What is the value of K + L + M in table above?

- A) 70 B) 71 C) 72 D) 73 E) 74

39.

K	L	M	N
4	13	7	16
8	25	15	B
14	43	C	56
6	D	11	24
			19

$$\Rightarrow A + B + C + D = ?$$

Yukarıdaki tabloda A + B + C + D kaçtır?

What is the value of A + B + C + D in table above?

- A) 84 B) 85 C) 86 D) 87 E) 88

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40.

▲	18	16	12
2	81	K	36
4	L	16	9
6	9	—	M

$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloda ▲ işleminin kuralı verilmiştir. Buna göre, K, L, M kaçtır?

According to the rule of ▲ operation established in the table above, what is the value of K, L, M?

	K	L	M
A)	64	—	4
B)	64	36	16
C)	—	—	9
D)	49	36	4
E)	49	25	9

41.

				●
4		10	K	
9				
	L			26
	22			
24		33	M	

$$\Rightarrow K - L + M = ?$$

Yukarıdaki tabloda K - L + M kaçtır?

What is the value of K - L + M in table above?

- A) 30 B) 32 C) 34 D) 36 E) 38

42.

		K
	L	
M		

$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloda K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M stand for in the table above?

- | K | L | M |
|----|---|---|
| A) | | |
| B) | | |
| C) | | |
| D) | | |
| E) | | |

43.

I	3	K
II	2	2
III	M	5

$$\Rightarrow K = ?; L = ?; M = ?$$

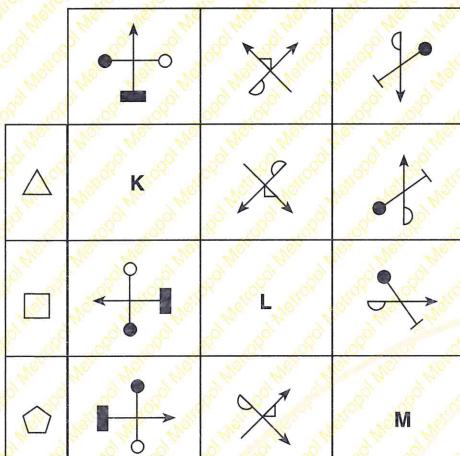
Yukarıdaki tabloda K, L ve M nin yerine hangi sayılar gelmelidir?

Which numbers do K, L and M stand for in the table above?

- | K | L | M |
|------|---|---|
| A) 3 | 1 | 5 |
| B) 2 | 2 | 3 |
| C) 1 | 2 | 4 |
| D) 1 | 2 | 3 |
| E) 3 | 2 | 4 |

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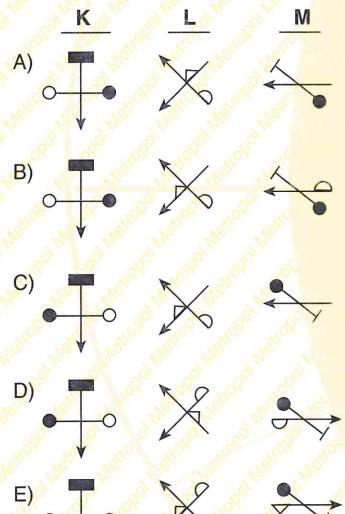
44.



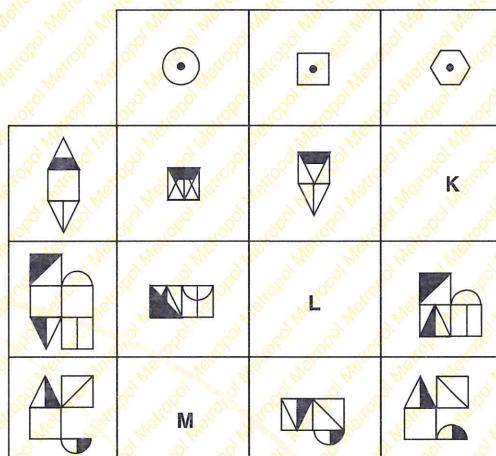
$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



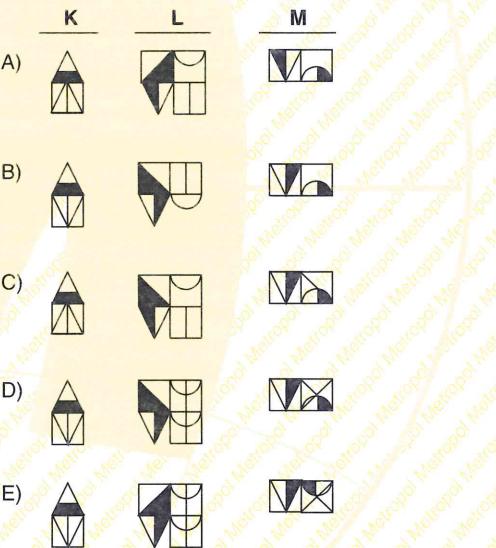
45.



$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
A	C	E	D	B	E	E	A	E
10	11	12	13	14	15	16	17	18
B	E	B	C	D	D	D	C	E
19	20	21	22	23	24	25	26	27
D	D	A	B	A	D	D	B	A
28	29	30	31	32	33	34	35	36
D	B	C	D	A	C	B	D	C
37	38	39	40	41	42	43	44	45
B	C	D	A	B	E	B	B	C

1.– 4. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In questions 1 – 4 each letter stands for a number different from zero in the given operations.

$$\begin{array}{r} \text{1. } \begin{array}{r} \text{KK} \\ + 22 \\ \hline \text{LL} \end{array} \quad \begin{array}{r} \text{L3} \\ + 3L \\ \hline \text{MM} \end{array} \quad \begin{array}{r} \text{M6} \\ - 6M \\ \hline 9 \end{array} \Rightarrow \begin{array}{r} \text{MLK} \\ - \text{KLM} \\ \hline \text{?? ?} \end{array} \end{array}$$

- A) 359 B) 395 C) 485 D) 495 E) 595

$$\begin{array}{r} \text{2. } \begin{array}{r} \text{ABC} \\ \times 235 \\ \hline \text{771} \end{array} \Rightarrow \text{ABC} = ? \end{array}$$

- A) 231 B) 239 C) 247 D) 249 E) 257

$$\begin{array}{r} \text{3. } \begin{array}{r} \text{KLK} \\ + \text{K15} \\ \hline 1291 \end{array} \Rightarrow \text{KLKK} = ? \end{array}$$

- A) 4544 B) 5655 C) 6766
D) 7877 E) 8988

$$\begin{array}{r} \text{4. } \begin{array}{r} \text{KL} \\ - \text{LK} \\ \hline 9 \end{array} \quad \begin{array}{r} \text{K} \\ - \text{M} \\ \hline \text{L} \end{array} \quad \begin{array}{r} \text{N} \\ \times \text{N} \\ \hline \text{RM} \end{array} \Rightarrow \text{R} + \text{N} = ? \end{array}$$

- A) 13 B) 14 C) 15 D) 16 E) 17

$$\begin{array}{r} \text{5. } \begin{array}{r} \text{K} \\ + \text{L} \\ \hline 15 \end{array} \quad \begin{array}{r} \text{L} \\ + \text{M} \\ \hline 35 \end{array} \\ \Rightarrow \text{K} + \text{L} + \text{M} = ? \end{array}$$

- A) 20 B) 25 C) 30 D) 40 E) 45

- I. $41 * = 205$
II. $51 * = 306$
III. $33 * = 198$
IV. $12 * = Z$ $19 * = Y$

Yukarıdaki dört eşitlikte $*$ işaretinin görevi aynıdır. Buna göre, $Z + Y$ kaçtır?

In the equations above, the function of $*$ remains unchanged.

What is the value of $Z + Y = ?$

- A) 220 B) 223 C) 226 D) 229 E) 232

7. I. $74 \circ 6 = 34$
 II. $63 \circ 9 = 27$
 III. $92 \circ 13 = 31$
 IV. $64 \circ 17 = ?$

Yukarıdaki dört eşitlikte \circ işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \circ remains unchanged. What does the question mark stand for in the fourth equation?

- A) 40 B) 41 C) 42 D) 43 E) 44

8. I. $a \blacksquare b = a + 2 \cdot b + 2$
 II. $a \bullet b = 3a - b + 3$
 III. $a \blacktriangle b = 3a + 2 \cdot b$
 IIII. $[(4 \blacksquare 1) \bullet 3] \blacktriangle 2 = ?$

Yukarıdaki ilk üç eşitlikte \blacksquare , \blacktriangle ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare , \blacktriangle and \bullet are given. What does the question mark stand for in the fourth equation?

- A) 73 B) 74 C) 75 D) 76 E) 77

9. I. $a * b = a + \frac{b}{2}$

II. $a \blacksquare b = \frac{a}{3} + b$

III. $(x * \frac{1}{y}) \blacksquare x = ?$

Yukarıdaki ilk iki eşitlikte $*$ ve \blacksquare işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $*$ and \blacksquare are given. What does the question mark stand for in the third equation?

A) $\frac{7xy + 2}{6y}$ B) $\frac{7xy + 3}{5y}$ C) $\frac{8xy + 2}{6y}$

D) $\frac{8xy + 3}{5y}$ E) $\frac{8xy + 1}{6y}$

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10. I. 5 8 24 27 81

II. 7 11 44 48 192

III. 2 7 35 40 200

IV. ? ? ? ? ?

A) 4 9 24 69 204

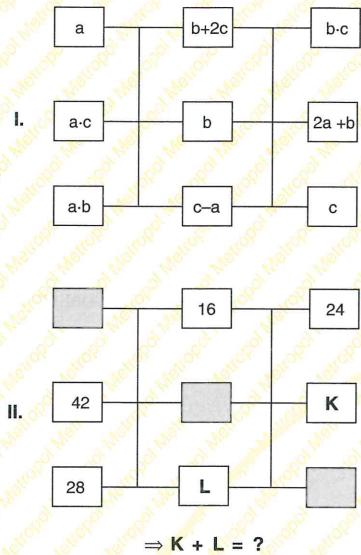
B) 3 4 8 9 18

C) 2 7 35 40 200

D) 6 5 25 20 100

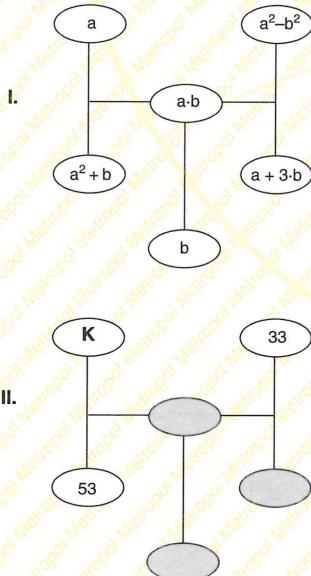
E) 1 7 42 48 288

11.



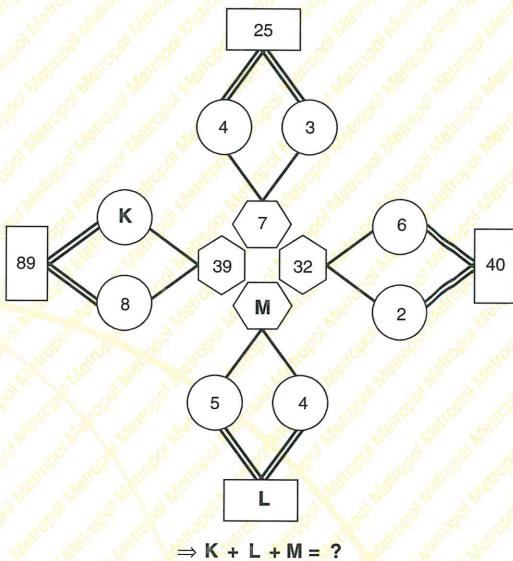
- A) 17 B) 18 C) 19 D) 20 E) 21

12.



- A) 6 B) 7 C) 8 D) 9 E) 10

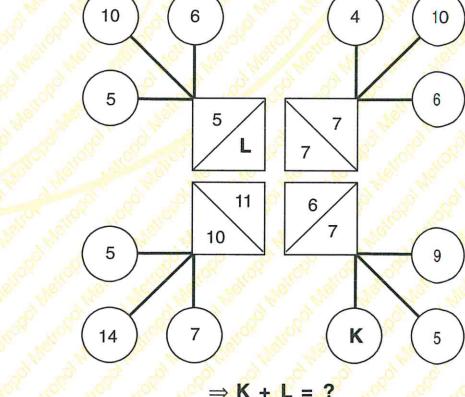
13.



- A) 54 B) 55 C) 56 D) 57 E) 58

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14.



- A) 14 B) 15 C) 16 D) 17 E) 18

15.

+	a	b	c
a		40	
b			68
c	56		

$$\Rightarrow b = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 14 B) 26 C) 38 D) 42 E) 54

16.

+	a	b	c
a			b+1
b		a+c+20	
c			

$$\Rightarrow b = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 9 B) 13 C) 21 D) 26 E) 32

17.

x	a	b	c
a		42	
b			24
c			

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre a + b + c kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of a + b + c?

- A) 21 B) 22 C) 23 D) 24 E) 25

18.

+	a	b	c
a			2-b
b			a-14

$$\Rightarrow b = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation and multiplication tables above, the letters a, b ve c each stand for a specific numeral. What is the value of b?

- A) 22 B) 23 C) 24 D) 25 E) 26

19.

*	6	2	3	1
5	-	-	8	6
6	12	8	-	-
8	14	10	-	-
3	K	L	M	4

$$\Rightarrow K = ?; L = ?; M = ?$$

- A) -, -, 5 B) -, -, 4 C) 6, -, 4
D) 9, 5, - E) -, -, 6

20.

•	A	B	C	D
15	-	3	-	5
36	6	-	K	12
40	-	8	10	-
55	-	L	-	M

$$\Rightarrow K = ?; L = ?; M = ?$$

- A) 11, 10, 9 B) 8, 11, - C) 9, 11, 7
 D) 8, 10, 9 E) 9, 11, -

21.

	♣	♦	♥
◇	K	20	8
△	10	L	4
○	65	32	M

$$\Rightarrow K + L + M = ?$$

- A) 51 B) 52 C) 53 D) 54 E) 55

22.

I	K		
II		L	
III			M

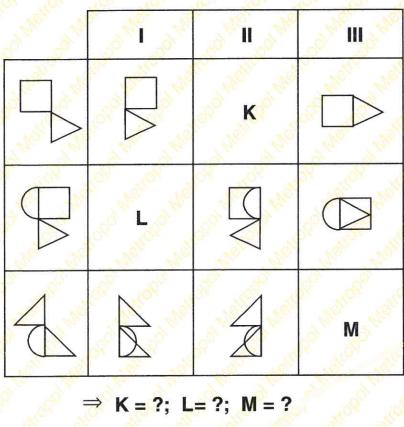
$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?

	K	L	M
A)			
B)			
C)			
D)			
E)			

23.



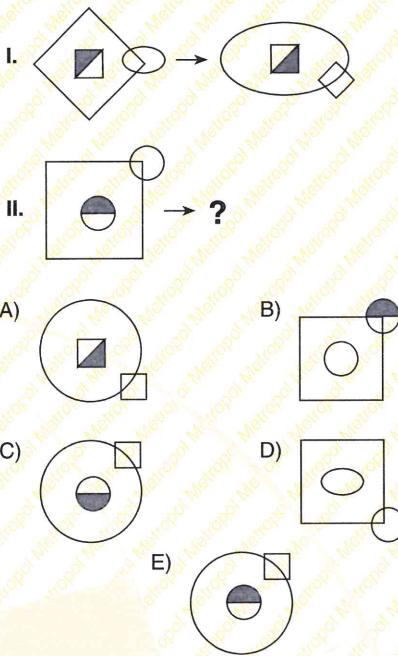
M L K

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?

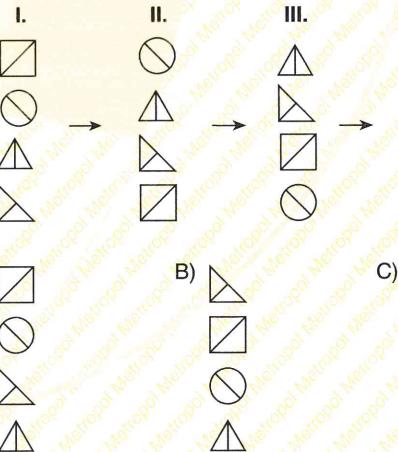
M	L	K
A)		
B)		
C)		
D)		
E)		

24.

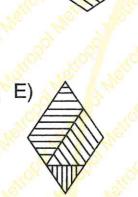
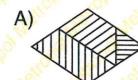
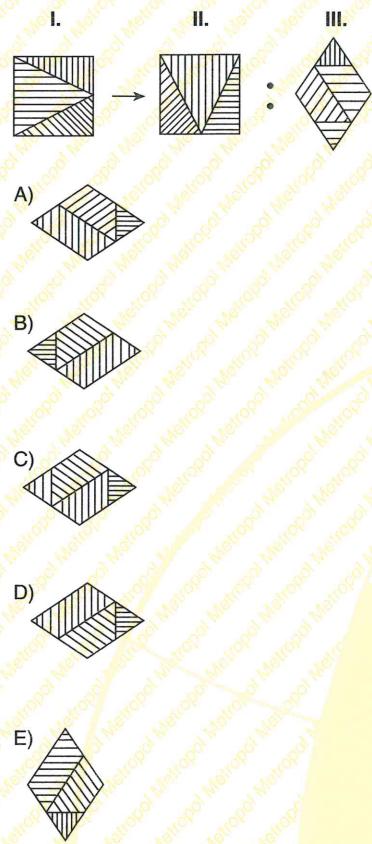


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25.



26.



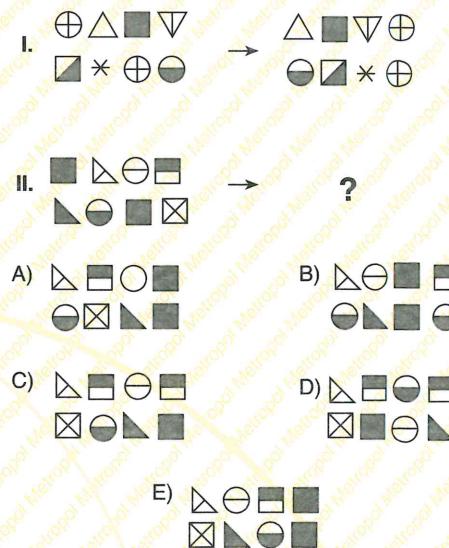
II.

III.

IV.

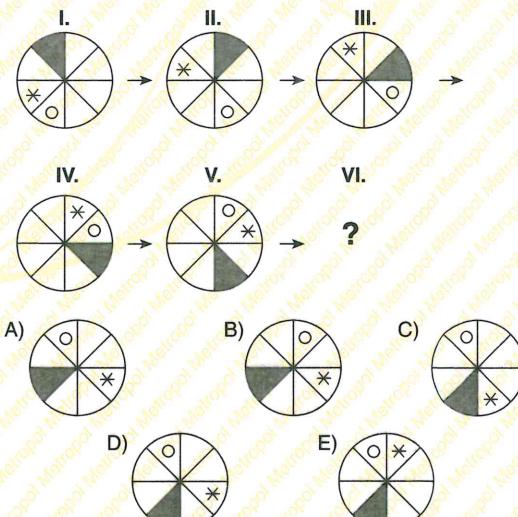
?

27.

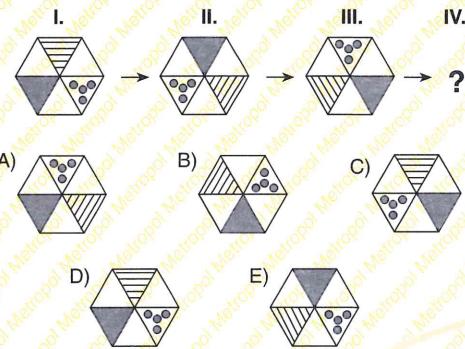


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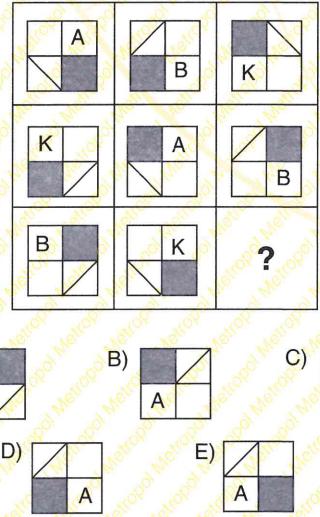
28.



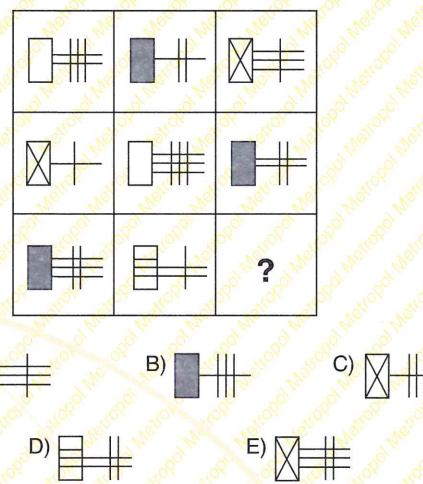
29.



30.

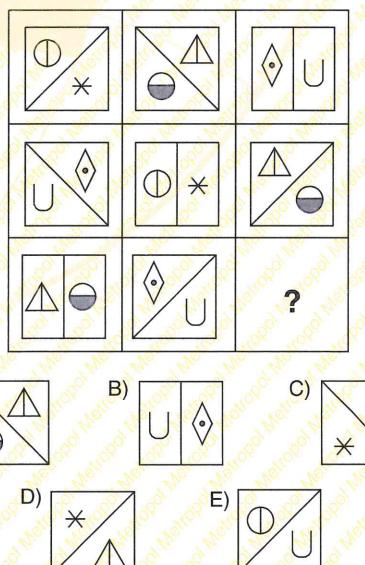


31.

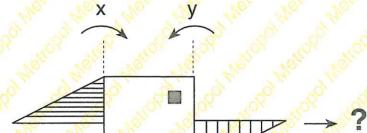


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32.



33.



Yukarıdaki şekil x ve y eksenlerinden ok işaretleri yönünde katlandığında aşağıdaki şekillerden hangisi elde edilir?

If the given figure folded x and y axis, which of the following figure is formed?

- A)
- B)
- C)
- D)
- E)

34.

I.

 $\rightarrow 2, 2, 1, 3$

II.

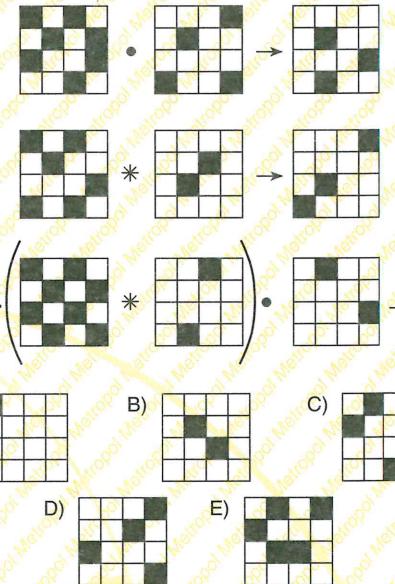
 $\rightarrow 3, 5, 3, 4$

III.

 $\rightarrow ?, ?, ?, ?$

- A) 4; 2; 1; 3
- B) 4; 3; 1; 2
- C) 3; 4; 2; 1
- D) 4; 3; 2; 1
- E) 3; 4; 1; 2

35.



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36.

I.

 $\rightarrow 8; 6; 1$

II.

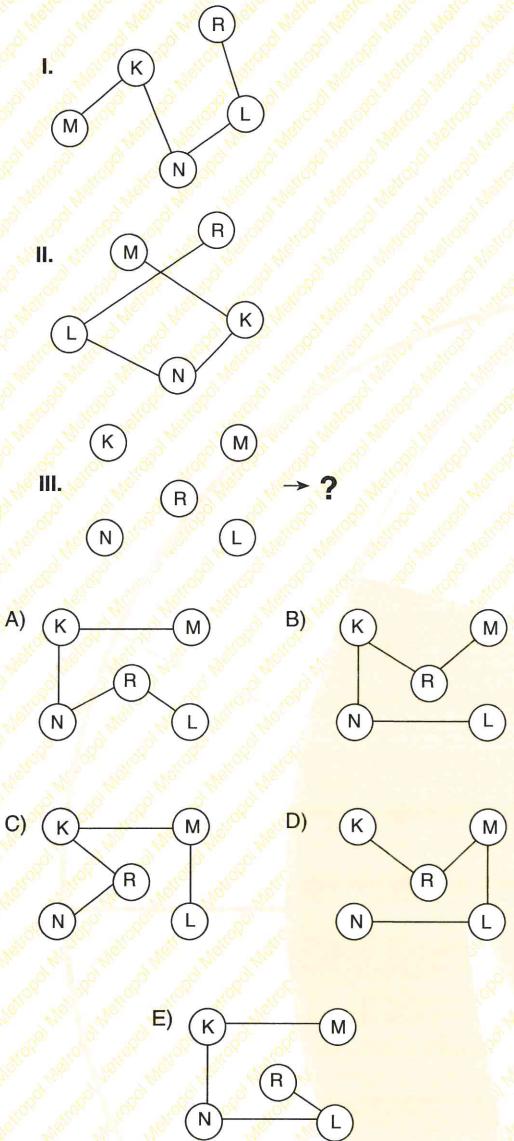
 $\rightarrow 6; 5; 2$

III.

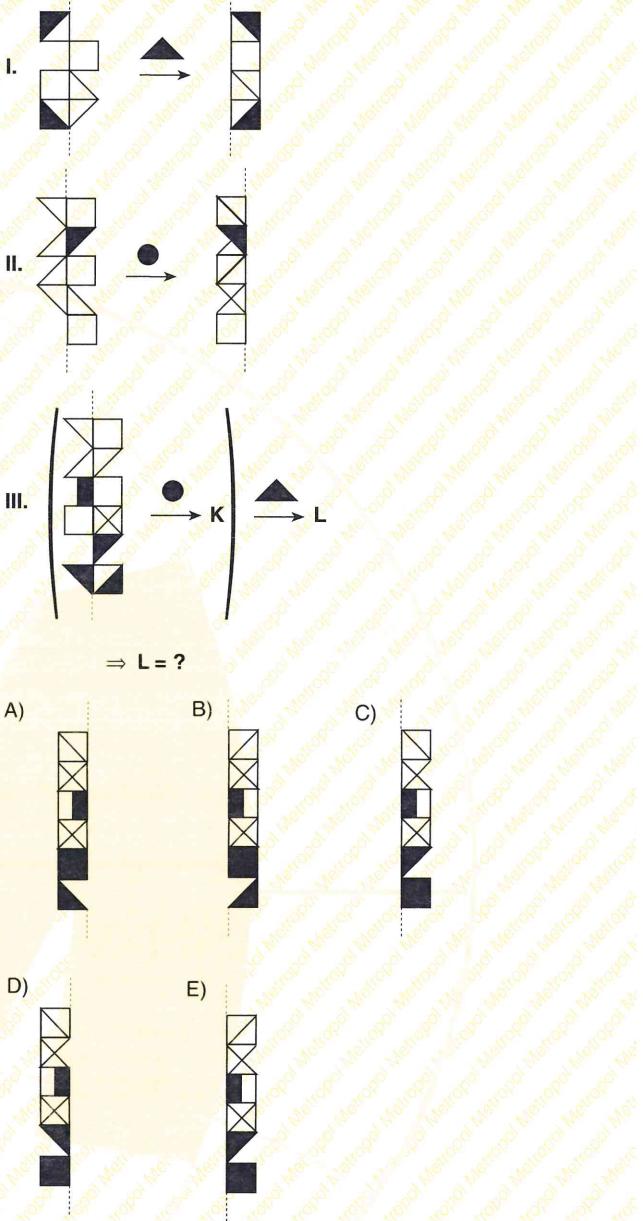
 $\rightarrow ?, ?, ?$

- A) 10; 7; 1
- B) 9; 7; 2
- C) 9; 6; 1
- D) 8; 6; 2
- E) 10; 7; 2

37.

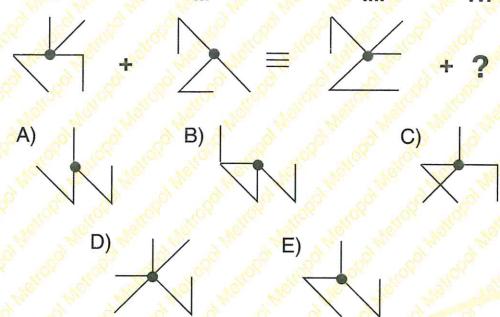


38.



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39.



A)

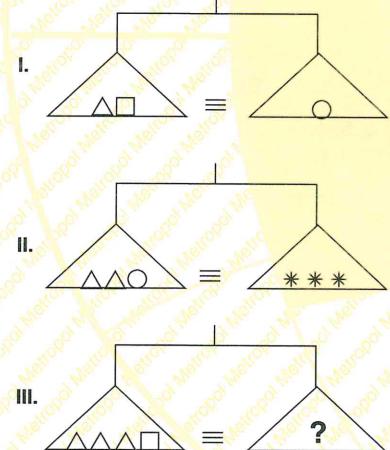
B)

C)

D)

E)

40.

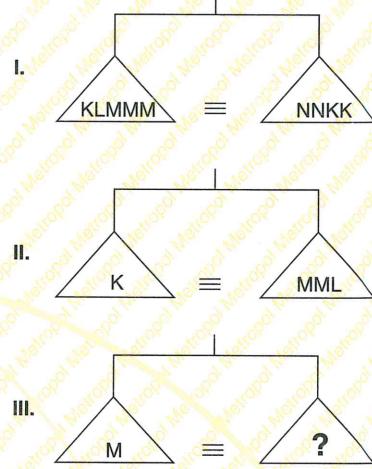


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen kütleler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

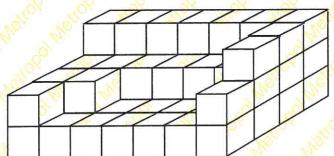
- A) * B) ** C) ***
D) **** E) *****

41.



- A) KL B) NN C) LN
D) KN E) NL

42.

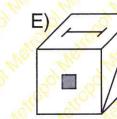
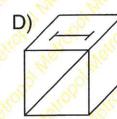
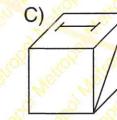
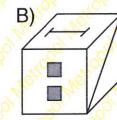
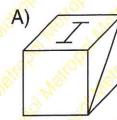
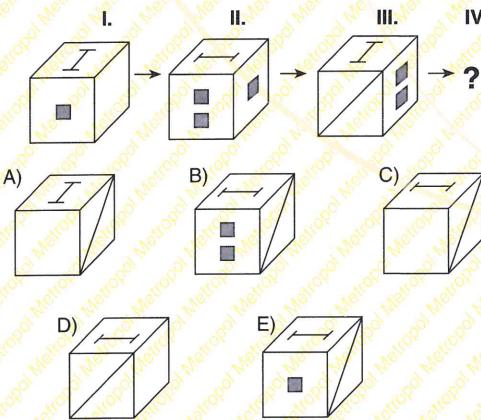


$x \times ? = ?$

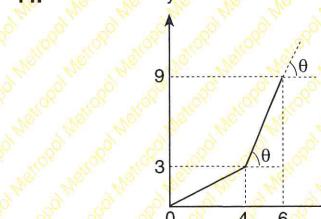
Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in given shape?
A) 54 B) 55 C) 56 D) 57 E) 58

43.



44.



$x = 48 \Rightarrow y = ?$

A) 133

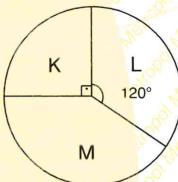
B) 134

C) 135

D) 136

E) 137

45.



$\Rightarrow K : L : M = ?$

A) 4; 3; 5

B) 5; 3; 4

C) 3; 4; 5

D) 3; 5; 4

E) 5; 4; 3

1.- 4. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretleri ile belirtilen harf ya da işlemin değerini bulunuz.

In questions 1 – 4 each letter stands for a number different from zero and each other in the given operations. Find the value of letter or operation indicated by the question mark.

$$\begin{array}{r} K \\ + K \\ \hline LM \end{array} \quad \begin{array}{r} K \\ - M \\ \hline L \end{array} \Rightarrow L + K = ?$$

- A) 8 B) 9 C) 10 D) 16 E) 17

$$\begin{array}{r} KL \\ + M \\ \hline LK \end{array} \quad \begin{array}{r} L \\ - K \\ \hline K \end{array} \Rightarrow M = ?$$

- A) 9 B) 8 C) 7 D) 6 E) 5

$$\begin{array}{r} K \\ + 4 \\ \hline L \end{array} \quad \begin{array}{r} L \\ - 2 \\ \hline M \end{array} \Rightarrow \begin{array}{r} LKM \\ - KML \\ \hline ??? \end{array}$$

- A) 162 B) 216 C) 283 D) 360 E) 378

$$\begin{array}{r} KK \\ \times L \\ \hline LL \end{array} \quad \begin{array}{r} LL \\ \times L \\ \hline NN \end{array} \quad \begin{array}{r} NN \\ \times RR \\ \hline \end{array} \Rightarrow L + N + R = ?$$

- A) 12 B) 13 C) 14 D) 15 E) 16

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- I. $a \bullet (b + 3) = (a + 2) \times b$
 II. $(a + 2) \blacksquare (b - 3) = a + b + 2$
 III. $(4 \bullet 7) \blacksquare (3 \blacksquare 5) = ?$

Yukarıdaki ilk iki eşitlikte \bullet ve \blacksquare işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yeri ne aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \bullet and \blacksquare are given. What does the question mark stand for in the third equation?

- A) 35 B) 36 C) 37 D) 38 E) 39

6. I. $a \blacktriangle b = \frac{a}{2} + \frac{b}{3}$

II. $a * b = a^2 + b^3$

III. $(6 \blacktriangle 9) \blacktriangle (4 * 2) = ?$

Yukarıdaki ilk iki eşitlikte \blacktriangle ve $*$ işaretlerinin görevleri verilmiştir. Buna göre, üçüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacktriangle and $*$ are given. What does the question mark stand for in the third equation?

- A) 10 B) 11 C) 12 D) 13 E) 14

7. I. $8 \bullet 3 = 20$

II. $14 \bullet 11 = 36$

III. $7 \bullet 2 = 15$

IV. $a \bullet b = ?$

Yukarıdaki dört eşitlikte \bullet işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \bullet remains unchanged.

What does the question mark stand for in the fourth equation?

A) $(a - 3) \cdot (b + 1)$

B) $(a + b) \cdot (b + 2)$

C) $(a - b) \cdot (b + 1)$

D) $(a - 2) \cdot (b + 2)$

E) $(a - b) \cdot (a + 1)$

8. I. $4 * 3 = 17$

II. $2 * 4 = 20$

III. $6 * 5 = 37$

IV. $a * b = ?$

Yukarıdaki dört eşitlikte $*$ işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of $*$ remains unchanged. What does the question mark stand for in the fourth equation?

A) $a^2 + b$ B) $2a + b$ C) $2a + b^2$

D) $a^2 + b^2$ E) $a + 2 \cdot b^2$

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9.

+	a	b	c
b	d	c	
c			
d	33		8b

$$\Rightarrow b = ?$$

Yukarıdaki toplama tablosunda a, b, c ve d harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation table above, the letters a, b, c and each stand for a specific numeral. What is the value of b?

- A) 3 B) 6 C) 12 D) 15 E) 18

10.

x	a	b	c
a		c	
b			
c	16-b		

$$\Rightarrow a = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of a?

- A) 2 B) 4 C) 8 D) 16 E) 32

11.

+	a	b	c
a		11	
b			7
c			

$$\Rightarrow b = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, b kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral. What is the value of b?

- A) 3 B) 4 C) 5 D) 6 E) 7

Deneme Sınavı 7

12.

▲	6	8	4
1		9	
9			85

$$\Rightarrow (3 \blacktriangle 4) \blacktriangle (4 \blacksquare 12) = ?$$

Yukarıdaki tablolarda \blacktriangle ve \blacksquare işlemlerinin kuralları verilmiştir. Buna göre, $(3 \blacktriangle 4) \blacktriangle (4 \blacksquare 12)$ kaçtır?

According to the rules of \blacktriangle and \blacksquare operations established in the tables above, what is the value of

$$(3 \blacktriangle 4) \blacktriangle (4 \blacksquare 12) ?$$

- A) 169 B) 171 C) 173 D) 175 E) 177

13.

●	2	3	6
4	22	25	34
5	26	K	38
8	38	41	50

$$a \bullet b = 3a + 4b$$

$$\Rightarrow K = ?$$

Yukarıdaki tabloda ● işleminin kuralı verilmiştir. Buna göre, K kaçtır?

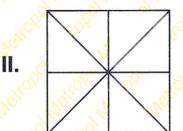
According to the rule of ● operation established in the table above, what is the value of K ?

- A) 26 B) 27 C) 28 D) 29 E) 30

14.



$$\rightarrow 5 - \frac{3}{8} = \frac{37}{8}$$



$$\rightarrow \frac{7}{2}$$

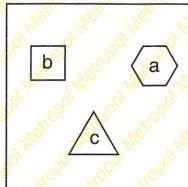


$$\rightarrow ?$$

$$A) \frac{17}{3} \quad B) 5 \quad C) 3 \quad D) \frac{13}{3} \quad E) \frac{11}{3}$$

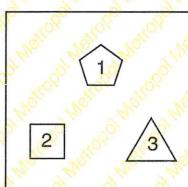
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15.



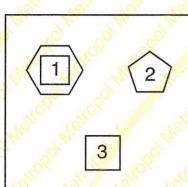
$$b^4 + c^3 + a^6$$

II.



$$36$$

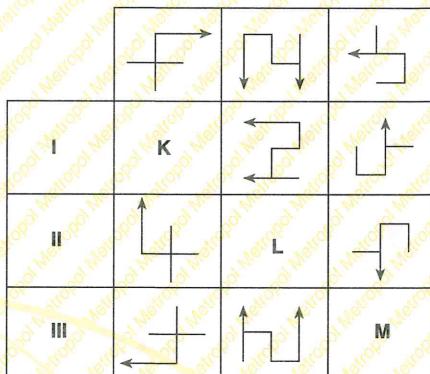
III.



$$?$$

- A) 113 B) 114 C) 115 D) 116 E) 117

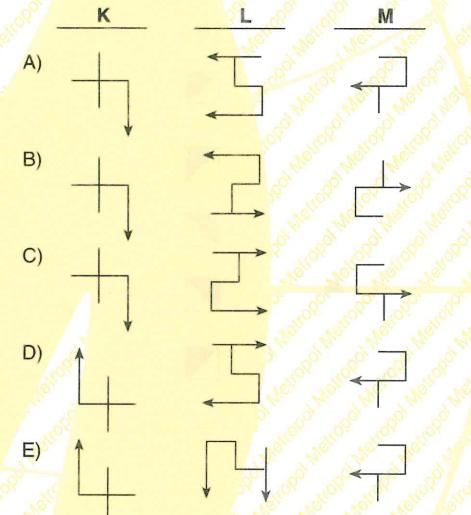
16.



$$\Rightarrow K = ?; \quad L = ?; \quad M = ?$$

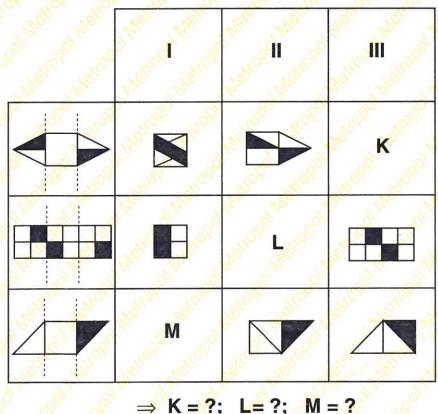
Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekillerin gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



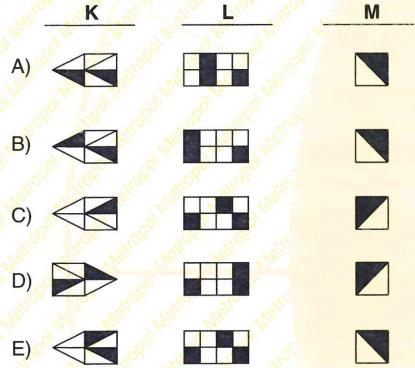
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17.

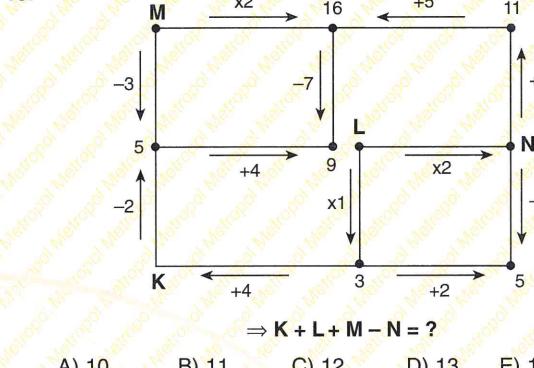


Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



18.



A) 10

B) 11

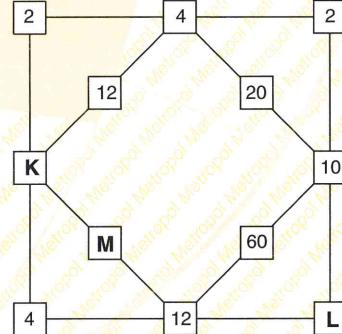
C) 12

D) 13

E) 14

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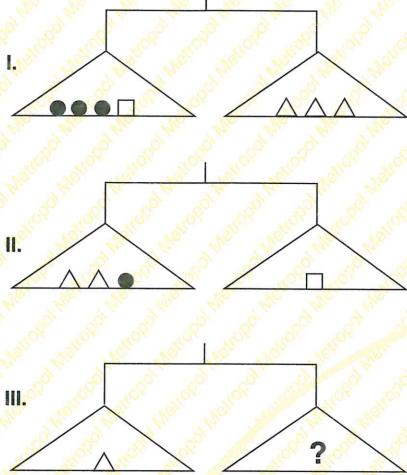
19.



$K = ?; L = ?; M = ?$

K	L	M
A) 6	8	36
B) 5	4	34
C) 5	8	38
D) 6	4	38
E) 4	6	36

20.

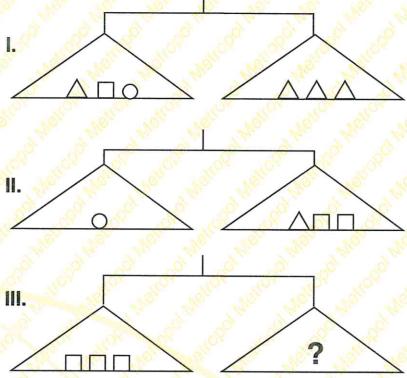


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) ●
- B) ●●
- C) ●●●
- D) ●●●●
- E) ●●●●●

21.

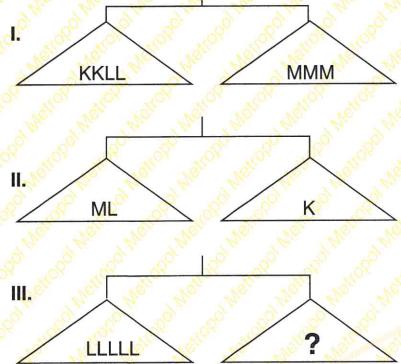


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) △
- B) ○
- C) △○
- D) △△
- E) ○○

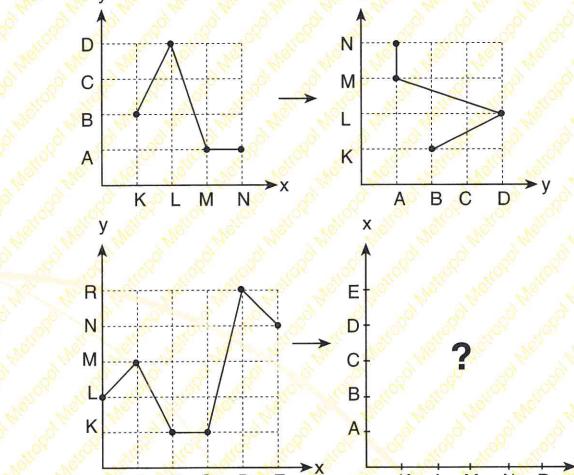
22.



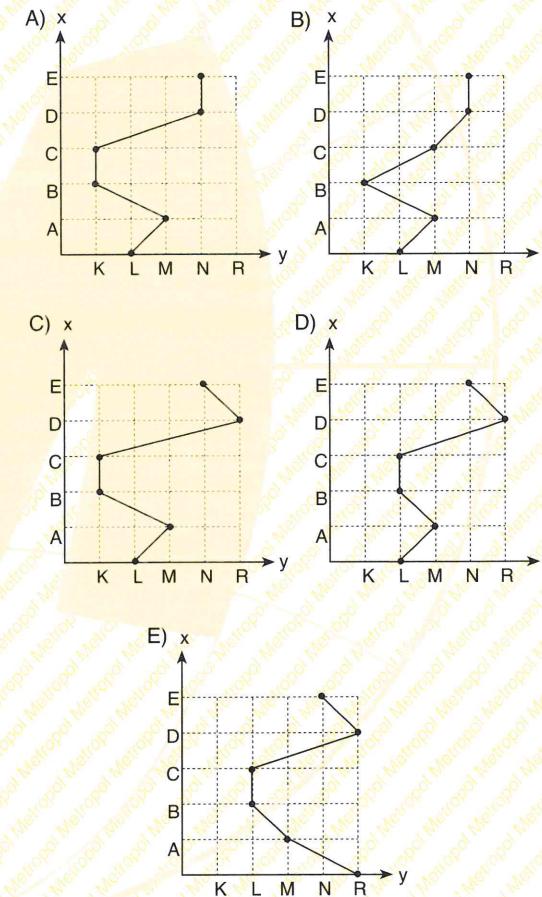
I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

- In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?
- A) M
 - B) K
 - C) KM
 - D) MMK
 - E) KKM

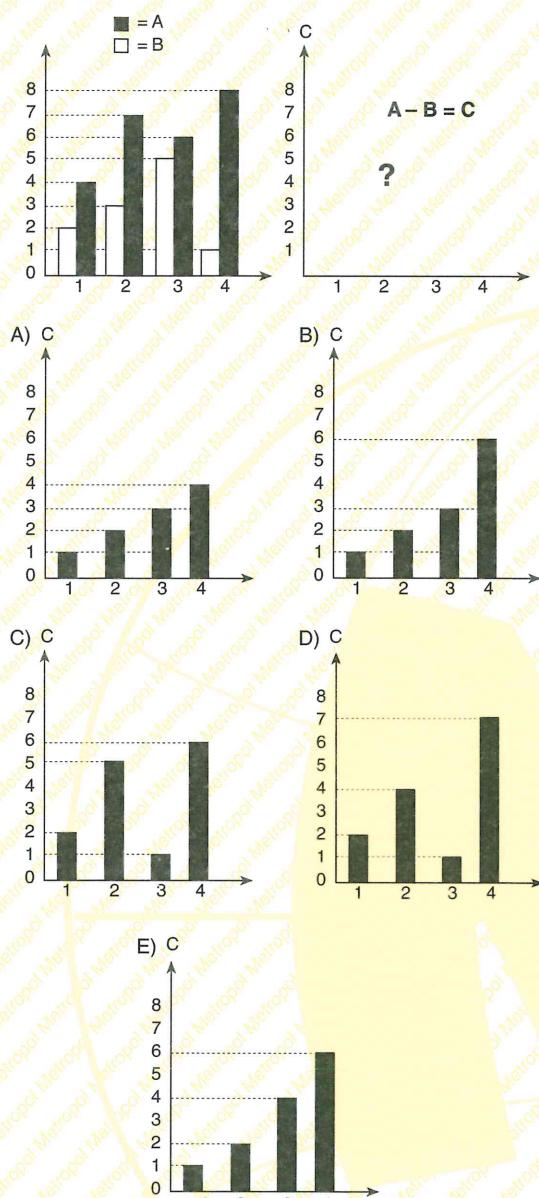
23.



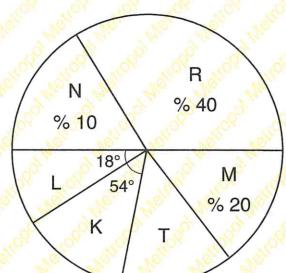
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24.



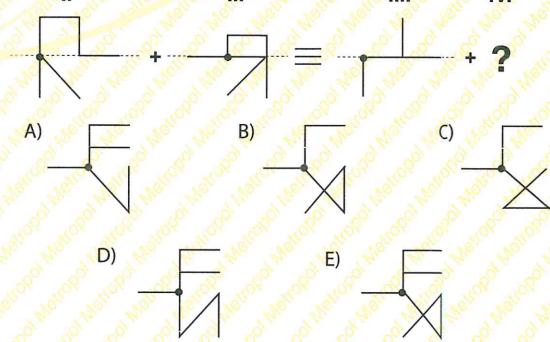
25.



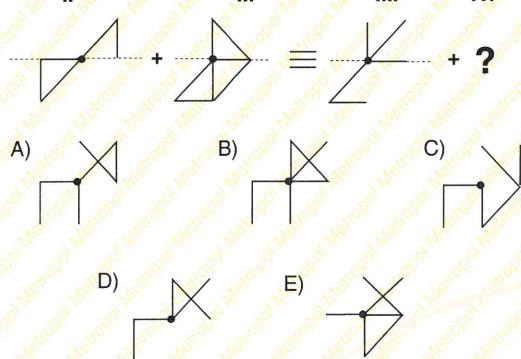
- A) 1 B) 2 C) 3 D) 4 E) 5

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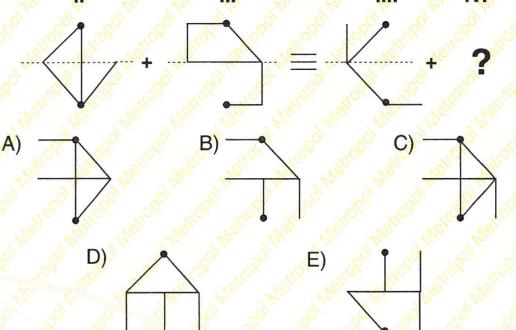
26.



27.

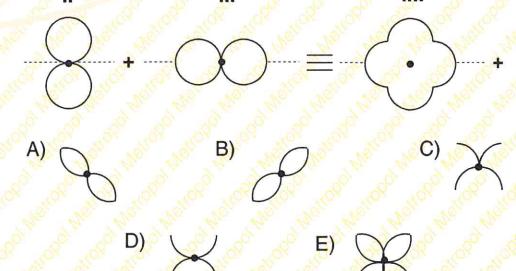


28.



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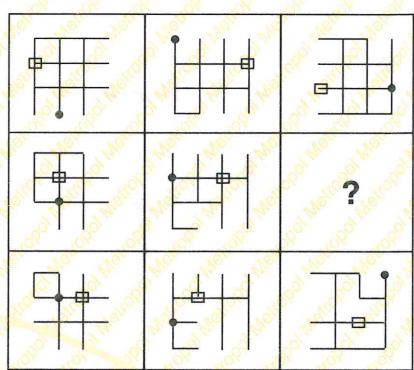
29.



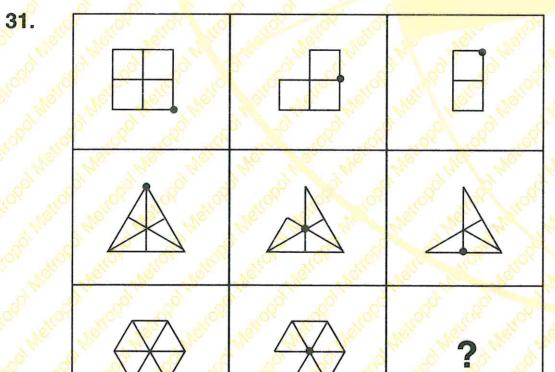
30. I. II. III. IV.

?

- A) B) C) D) E)



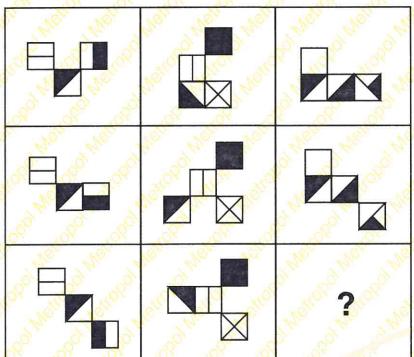
- A) B) C) D) E)



- A) B) C)
D) E)

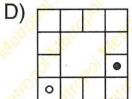
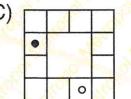
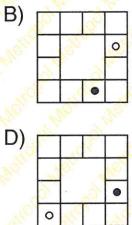
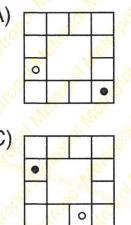
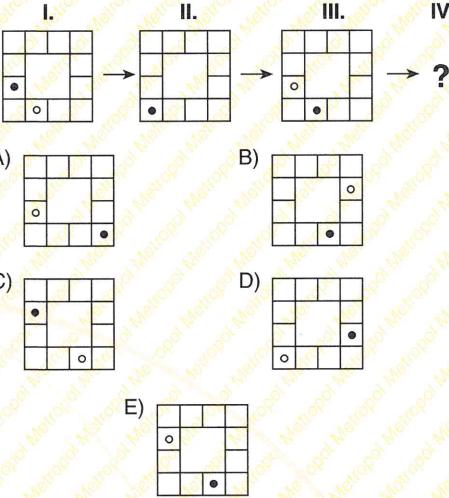
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33.



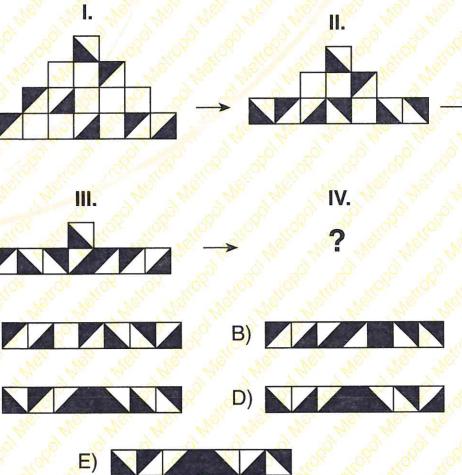
- A)
- B)
- C)
- D)
- E)

34.

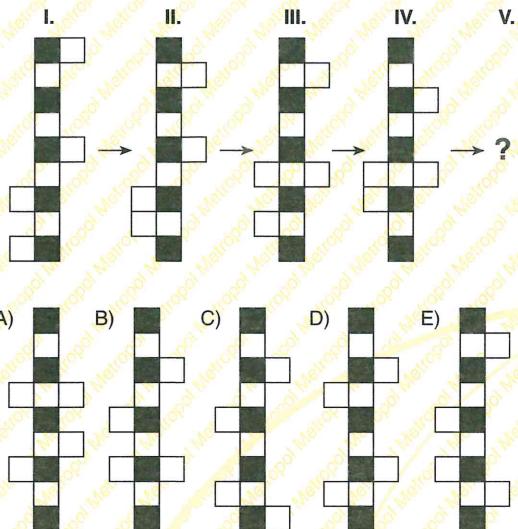


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35.



36.



A)

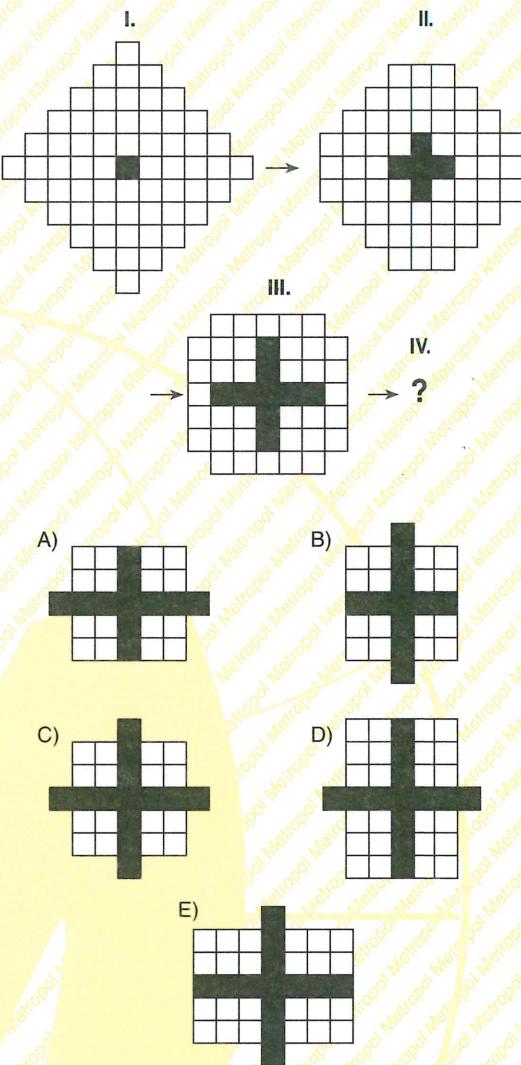
B)

C)

D)

E)

37.



A)

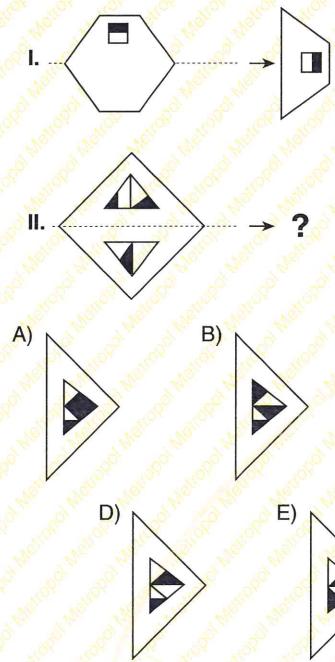
B)

C)

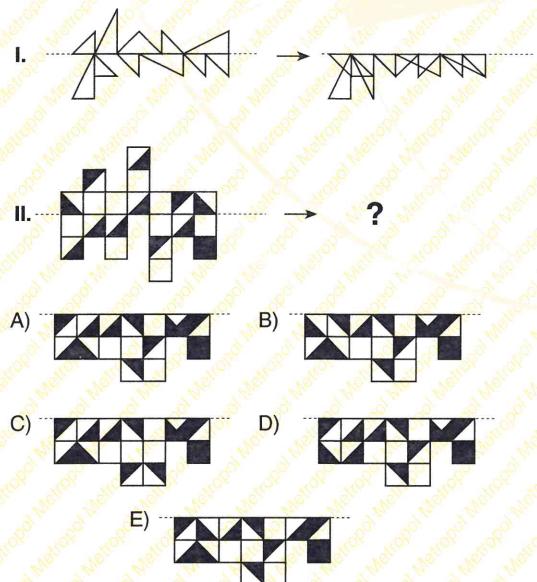
D)

E)

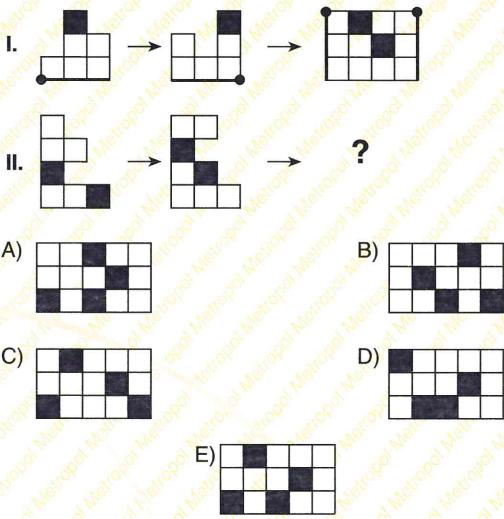
38.



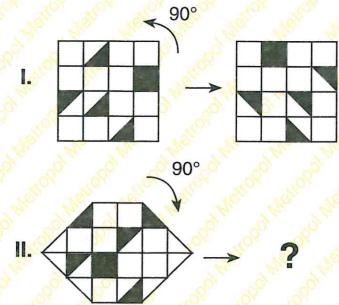
39.



40.

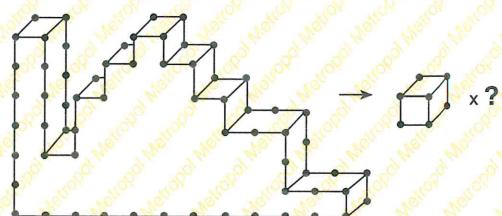


41.



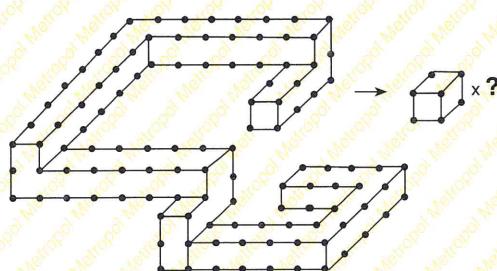
- A)
- B)
- C)
- D)
- E)

42.

**Yukarıdaki şekilde kaç tane küp vardır?**How many cubes are there in the figure above?
A) 42 B) 41 C) 40 D) 39 E) 38

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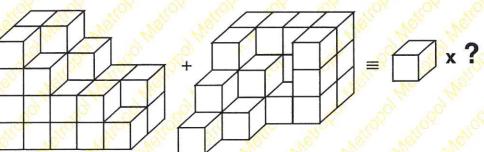
43.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are there in the figure above?

- A) 36 B) 37 C) 38 D) 39 E) 40

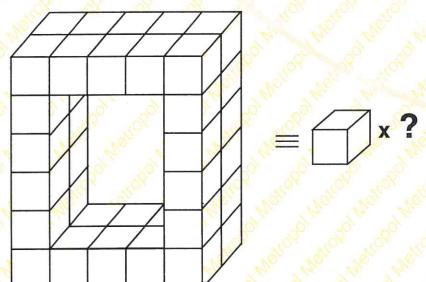
45.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are there in the figure above?

- A) 49 B) 50 C) 51 D) 52 E) 53

44.

**Yukarıdaki şekilde kaç tane küp vardır?**

How many cubes are there in the figure above?

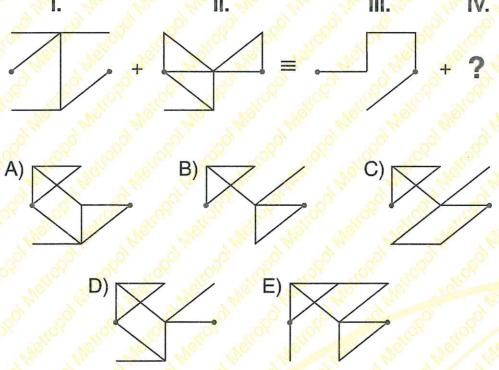
- A) 30 B) 32 C) 34 D) 36 E) 38

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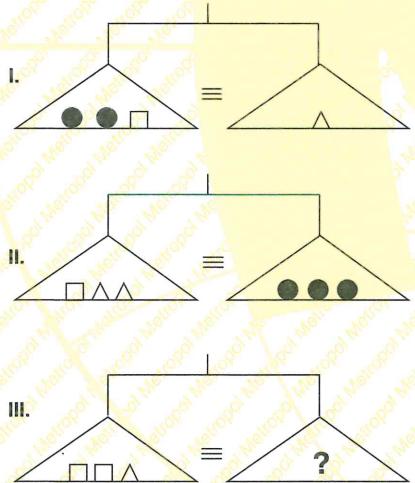
YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
C	A	E	C	D	B	C	C	A
10	11	12	13	14	15	16	17	18
B	B	C	D	E	B	C	B	C
19	20	21	22	23	24	25	26	27
A	D	A	B	C	D	B	E	C
28	29	30	31	32	33	34	35	36
C	E	B	C	D	B	E	C	B
37	38	39	40	41	42	43	44	45
C	B	A	E	D	C	B	D	D

1.



2.

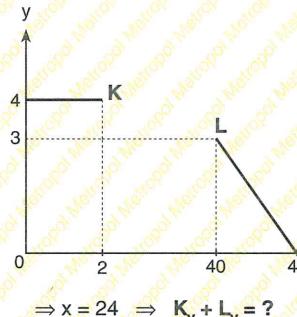


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazi
nin boş kefesine aşağıdakilerin hangisinde verilen kütler
konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses
below, when placed on the empty tray in III, will make the
scale balance?

- A) ● B) ● □ C) ● ●
 D) △ △ ● E) △ ●

3.



A) 19

B) 27

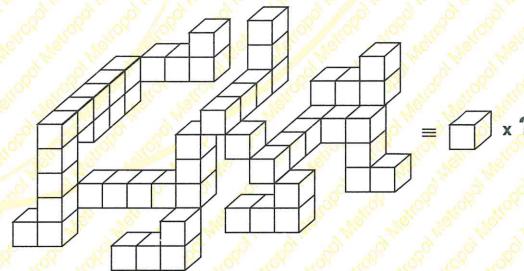
C) 34

D) 43

E) 61

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4.

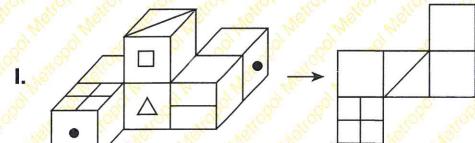


Yukarıdaki şekilde kaç tane küp vardır?

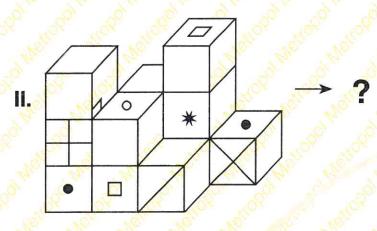
How many cubes are there in the figure above?

- A) 48 B) 49 C) 50 D) 51 E) 52

5.

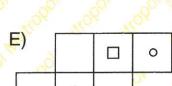
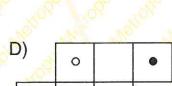
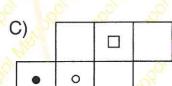
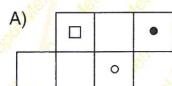


I.



I. şekildeki küplerin üstten görünüşü II. şekildeki gibidir.
Buna göre, III. şekildeki küplerin üstten görünüşü aşağıdakilerden hangisidir?

The cubes in figure I are seen from above as in figure II. Which of the following shows the appearance of the cubes in figure III when viewed from above?



6.

	—		L

$$\Rightarrow K = ? ; L = ?$$

Yukarıdaki tabloya göre K ve L nin yerine hangi şekiller gelmelidir?

Which figures do K and L question marks stand for in the table above?

- | L | K |
|----|---|
| A) | |
| B) | |
| C) | |
| D) | |
| E) | |

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7.

		?

Yukarıdaki tabloya göre soru işaretinin yerine hangi şekiller gelmelidir?

Which figures do question mark stand for in the table above?

- | | |
|----|----|
| A) | B) |
| C) | D) |
| E) | |

8.

Yukarıdaki tabloda soru işaretinin yerine hangi şekiller gelmelidir?

Which figures do question mark stand for in the table above?

- A)
 B)
 C)

- D)
 E)

9.

$\Rightarrow K = ? ; L = ? ; R = ? ; N = ?$

I, II ve III yukarıdaki tablonun farklı birer parçasıdır. Buna göre, K, L, R ve N nin yerine aşağıdakilerden hangileri gelmelidir?

I, II and III are three different parts of the table above. Which of the following do K, L, R and N stand for?

- | K | L | R | N |
|----|---|---|---|
| A) | | | |
| B) | | | |
| C) | | | |
| D) | | | |
| E) | | | |

10.

I.

II.

$$\Rightarrow K = ? ; L = ?$$

I. satırda belirlenen ilişkiye göre, II. satırındaki K ve L nin yerine aşağıdaki şekillerden hangileri gelmelidir?

Which of the figures below completes K and L in the II. figure, in accordance with the relationship established in I?

- A) ;
 B) ;
 C) ;
 D) ;
 E) ;

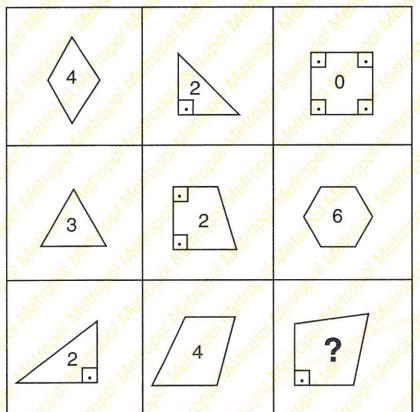
$$\Rightarrow X = ? ; Y = ?$$

Yukarıdaki tabloya göre X ve Y nin yerine hangi şekiller gelmelidir?

Which figures do X and Y question marks stand for in the table above?

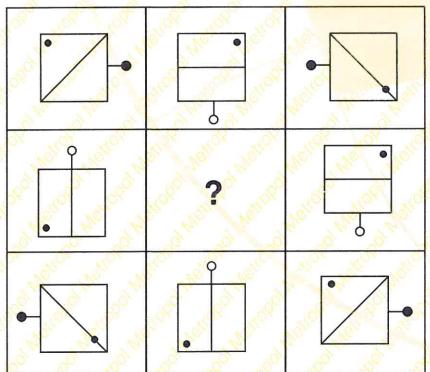
- A) ;
 B) ;
 C) ;
 D) ;
 E) ;

12.



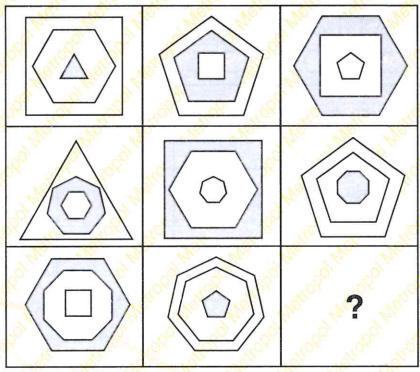
- A) 1 B) 2 C) 3 D) 4 E) 6

13.



- A) B) C)
 D) E)

14.

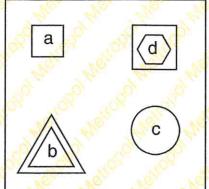


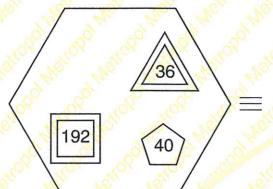
- A) B) C)
 D) E)

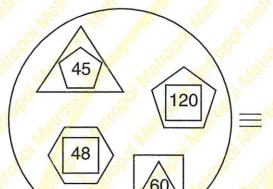
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Deneme Sınavı 8

15.

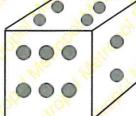
I. 
 $\equiv \frac{a}{4} + \frac{b}{3} + \frac{c}{1} + \frac{d}{6}$

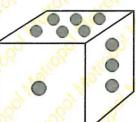
II. 
 $\equiv \frac{192}{4} + \frac{36}{3} + \frac{40}{5}$

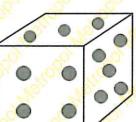
III. 
 $\equiv ?$

- A) 12 B) 13 C) 14 D) 15 E) 16

16.

I. 
 $= 9$

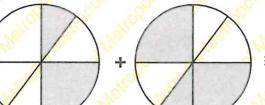
II. 
 $= 11$

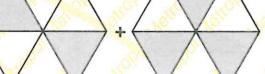
III. 
 $= ?$

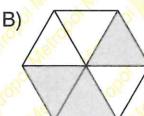
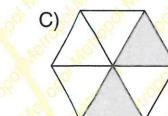
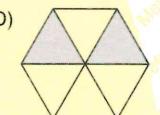
- A) 6 B) 7 C) 8 D) 9 E) 10

17.

I. 
 $+ \quad \equiv$
 $\quad \quad \quad$

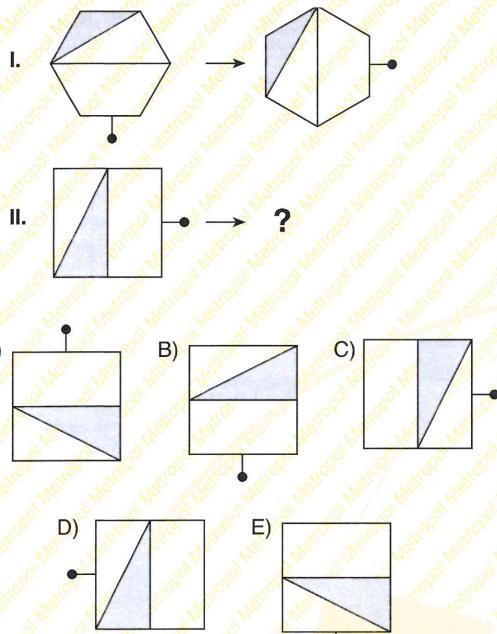
II. 
 $+ \quad \equiv$
 $\quad \quad \quad$

III. 
 $+ \quad \equiv$
 $\quad \quad \quad ?$

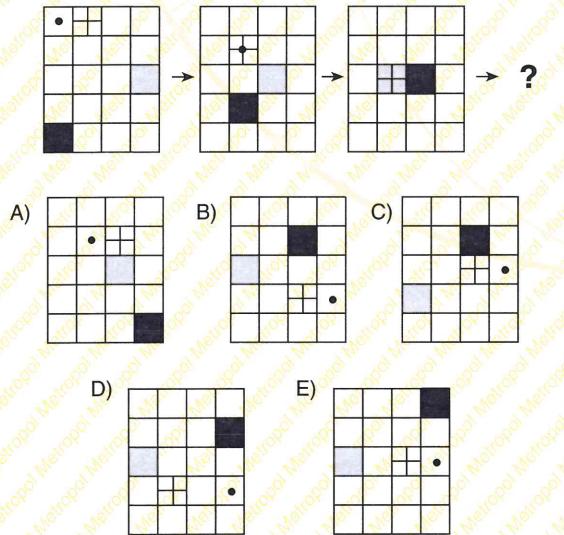
- A) 
B) 
C) 
D) 
E) 

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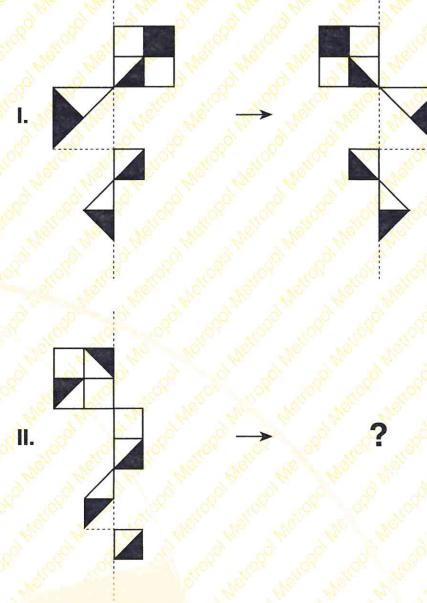
18.



19.



20.



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21. – 25. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In questions 21 – 25 each letter stands for a number different from zero and each other in the given operations. Find the value of letter or operation indicated by the question mark.

$$\begin{array}{r} K L M \\ \times \quad 2 R \\ \hline 3 T M \\ + 2 5 0 \\ \hline L N T M \end{array}$$

- A) 7 B) 8 C) 9 D) 10 E) 11

$$\begin{array}{r} K K \quad L 3 \\ + 3 3 \quad + 3 L \\ \hline L L \quad M M \\ \quad \quad \quad - L M \\ \quad \quad \quad ? ? \end{array} \Rightarrow M L$$

- A) 24 B) 25 C) 26 D) 27 E) 28

$$\begin{array}{r} 1 K L \\ \times \quad 2 N \\ \hline K 0 N \\ + 3 5 2 \\ \hline N M M 4 \end{array} \Rightarrow L + M = ?$$

- A) 5 B) 6 C) 7 D) 8 E) 9

$$\begin{array}{r} KK \quad MM \quad KM \\ KL \quad MN \quad LK \\ LL \quad NN \quad MN \\ + LK \quad + NM \quad + NL \\ 132 \quad 242 \quad ?? \end{array} \Rightarrow$$

- A) 154 B) 165 C) 176 D) 187 E) 198

$$\begin{array}{r} KL \quad M \\ \hline 7 \end{array} \quad \begin{array}{r} MN \quad N \\ \hline 8 \end{array} \Rightarrow K + N = ?$$

- A) 14 B) 15 C) 16 D) 17 E) 18

26. soruda, I gruptaki kelimelelerin harfleri birer rakam ile gösterilerek II. gruptaki sayılar elde edilmiştir. Soru işaretü ile belirtilen kelimenin hangi sayı ile gösterildiğini bulunuz.

In question 26 the numbers in group I stands for the words in group I. when each letter has been coded with specific numeral. Find the number which corresponds the word indicated by the question mark.

26. KUTU

UTUK

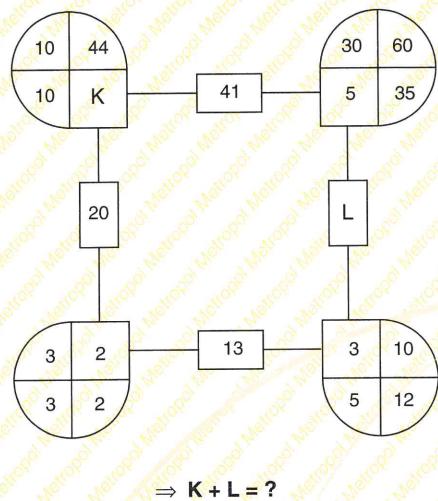
$$UTUK \Rightarrow TUTU = ?$$

TUTU

TUKU

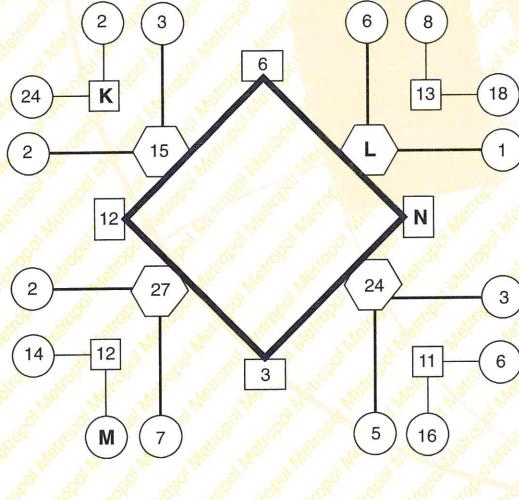
- A) 5292 B) 2925 C) 2952
D) 9292 E) 9252

27.



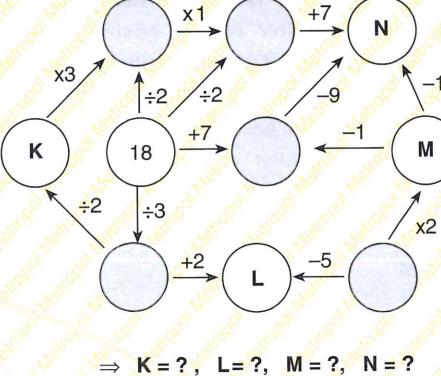
- A) 35 B) 36 C) 37 D) 38 E) 39

28.



- | K | L | M | N |
|-------|----|----|---|
| A) 13 | 21 | 9 | 5 |
| B) 12 | 20 | 10 | 5 |
| C) 14 | 22 | 11 | 4 |
| D) 12 | 22 | 9 | 4 |
| E) 13 | 21 | 10 | 3 |

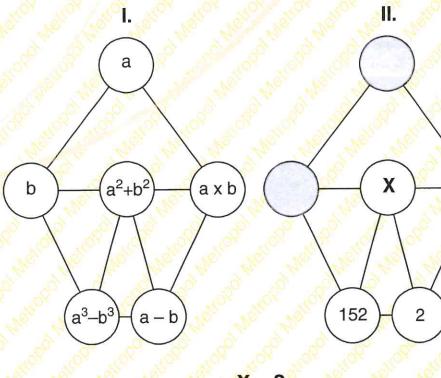
29.



- | K | L | M | N |
|-------|---|----|----|
| A) 26 | 8 | 3 | 16 |
| B) 26 | 9 | 3 | 16 |
| C) 3 | 8 | 26 | 18 |
| D) 3 | 8 | 26 | 16 |
| E) 26 | 9 | 16 | 18 |

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30.



- A) 16 B) 20 C) 24 D) 36 E) 52

31. I. $a * b = \frac{a+b}{2}$

II. $a \Delta b = \frac{a \Delta b}{3}$

III. $a \Delta b = \frac{a \cdot b}{4}$

IV. $(6 \Delta 8) * (8 \Delta 2) = ?$

Yukarıdaki ilk üç eşitlikte $*$, Δ ve Δ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $*$, Δ and Δ are given. What does the question mark stand for in the fourth equation?

- A) $\frac{2}{3}$ B) $\frac{4}{3}$ C) $\frac{3}{4}$ D) $\frac{5}{4}$ E) $\frac{5}{6}$

32. I. $4a \bullet 3b = a + 2b$

II. $a^3 * b^4 = a^2 + b$

III. $3a \Delta b^2 = a \bullet b$

IV. $a \blacksquare b = a + b$

V. $(12 \Delta 36) \blacksquare (125 * 16) = ?$

Yukarıdaki ilk dört eşitlikte \bullet , \blacksquare , $*$ ve Δ işaretlerinin görevleri verilmiştir. Buna göre, beşinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \bullet , \blacksquare , $*$ and Δ are given. What does the question mark stand for in the fifth equation?

- A) 18 B) 21 C) 27 D) 32 E) 47

33. I. $49 \blacksquare 81 = 63$

II. $64 \blacksquare 25 = 40$

III. $169 \blacksquare 16 = 52$

IV. $9 \blacksquare 121 = ?$

Yukarıdaki dört eşitlikte \blacksquare işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \blacksquare remains unchanged.

What does the question mark stand for in the fourth equation?

- A) 24 B) 33 C) 44 D) 54 E) 42

34. I. $64 \bullet 8 = 56$

II. $25 \bullet 5 = 20$

III. $49 \bullet 7 = 42$

IV. $36 \bullet 6 = ?$

Yukarıdaki dört eşitlikte \bullet işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \bullet remains unchanged.

What does the question mark stand for in the fourth equation?

- A) 28 B) 30 C) 32 D) 34 E) 36

35. I. $27 \blacktriangle 18 = 2178$

II. $98 \blacktriangle 42 = 9482$

III. $45 \blacktriangle 64 = 4654$

IV. $57 \blacktriangle 85 = ?$

Yukarıdaki dört eşitlikte \blacktriangle işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \blacktriangle remains unchanged.

What does the question mark stand for in the fourth equation?

- A) 5875 B) 8557 C) 4875
D) 7585 E) 7855

36.

*	24	86	93
27	K	23	21
98	23	31	29
77	20	28	L

$$\Rightarrow K + L = ?$$

Yukarıdaki tabloda ***** işleminin kuralı verilmiştir. Buna göre, **K + L** kaçtır?

According to the rule of ***** operation established in the table above, what is the value of **K + L**?

- A) 38 B) 39 C) 40 D) 41 E) 42

37.

●	5	8	2
4	K	68	
9		L	13
16	41		M

$$\Rightarrow (X + Y + Z) - (K + L + M) = ?$$

Yukarıdaki tablolarda **●** ve ***** işlemlerinin kuralları verilmiştir. Buna göre, $(X + Y + Z) - (K + L + M)$ kaçtır?

According to the rules of **●** and ***** operations established in the table above, what is the value of

$$(X + Y + Z) - (K + L + M) ?$$

- A) 46 B) 48 C) 50 D) 52 E) 54

38.

!	•	Y	W
2	7		M
9	K	14	
4	15	L	14
12		17	28
16			N

$$\Rightarrow K = ? ; L = ? ; M = ? ; N = ?$$

Yukarıdaki tabloda **!**, **•**, **Y** ve **W** işlemlerinin kuralları verilmiştir. Buna göre, **K**, **L**, **M** ve **N** kaçtır?

According to the rules of **!**, **•**, **Y** and **W** operations established in the table above, what are the values of **K**, **L**, **M** and **N**?

	K	L	M	N
A)	35	11	6	32
B)	34	9	10	34
C)	36	7	8	34
D)	36	7	6	36
E)	35	9	8	36

39.

4	8	40	4	2
5	2	25	3	5
3	6	?	6	1
2	1	8	3	2

Yukarıdaki tabloda soru işaretinin yerine hangi sayı gelmelidir?

Which number do question mark stand for in the table above?

- A) 18 B) 20 C) 22 D) 24 E) 26

40.

+	a	b	c
a			$2b+27$
b	$2 \cdot c$		$a - 5$
c			

$$\Rightarrow a = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of a?

- A) 19 B) 20 C) 21 D) 22 E) 23

41.

+	a	b
a		$\sqrt{4d}$
b		

$$\Rightarrow \frac{e}{d} = ?$$

Yukarıdaki toplama ve çarpma tablosunda a, b, c, d ve e harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $\frac{e}{d}$ kaçtır?

In the summation table above, the letters a, b, c, d and e each stand for a specific numeral. What is the value of $\frac{e}{d}$?

- A) $\frac{1}{4}$ B) $\frac{1}{2}$ C) 2 D) 4 E) 8

42.

+	a	b	c
a			$2 \cdot c$
b			$a + 13$
c			20

$$\Rightarrow a + c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + c kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of a + c?

- A) 15 B) 16 C) 17 D) 18 E) 19

43.

x	a	b	c
a		2·c	
b			
c	b^2		

$$\Rightarrow \frac{b^3}{c^2} = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $\frac{b^3}{c^2}$ kaçtır?

In the multiplication table above, the letters a, b and c each stand for a specific numeral. What is the value of $\frac{b^3}{c^2}$?

- A) $\frac{1}{4}$ B) $\frac{1}{2}$ C) 1 D) 2 E) 4

44.

+	a	b	c	d
a			10	
b		a		
c			d	4-b

$$\Rightarrow a = ?$$

Yukarıdaki toplama tablosunda a, b, c ve d harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a kaçtır?

In the summation table above, the letters a, b, c and d each stand for a specific numeral. What is the value of a?

- A) 1 B) 2 C) 4 D) 6 E) 8

45.

+	a	b	c
a		$b - 2$	
b			$c + 4$
c			$a + b + 13$

$$\Rightarrow a + c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, a + c kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of a + c?

- A) 11 B) 12 C) 13 D) 14 E) 15

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
D	A	A	E	B	C	E	E	E
10	11	12	13	14	15	16	17	18
A	D	C	C	A	E	D	C	B
19	20	21	22	23	24	25	26	27
D	C	D	D	D	D	C	D	D
28	29	30	31	32	33	34	35	36
E	D	E	A	D	B	B	A	D
37	38	39	40	41	42	43	44	45
B	E	D	D	B	B	D	D	E

1. soruda, I gruptaki şekiller, birer sayı ile gösterilerek II. gruptaki sayılar elde edilmiştir. Soru işaretü ile belirtilen şekillerin, hangi sayılar ile gösterildiğini bulunuz.

In question 1, the figures in group I stands for the numbers in group II. When each figure has been coded with specific numeral, find the figures which corresponds the numeral indicated by the question mark.

I.	II.
\triangle	■ ■ □
○	□ ● ○
□ ▲ ○	539
○ □ ■	597
△ ▲ ■	179
$\Rightarrow 1375 = ?$	

- A) ○▲□△ B) ▲○■△ C) ■▲□△
 D) ○●△▲ E) △▲□○

2. – 5. sorulardaki işlemlerde her harf sıfırdan ve birbirinden farklı birer rakamı göstermektedir. Soru işaretü ile belirtilen harf ya da işlemin değerini bulunuz.

In questions 2 – 5 each letter stands for a different numeral zero excepted in the operations given. Find the value of letter or operation indicated by the question mark.

$$\begin{array}{r} \text{K L M} \\ + \text{A B C} \\ \hline 1 3 7 2 \end{array} \quad \begin{array}{r} \text{K L M} \\ - \text{A B C} \\ \hline 3 1 4 \end{array}$$

$\Rightarrow \text{K} + \text{M} - \text{B} = ?$

- A) 7 B) 8 C) 9 D) 10 E) 11

$$\begin{array}{r} \text{A B C} \\ + \text{D B C} \\ \hline \text{C C O} \end{array} \Rightarrow \max(\text{A} + \text{B} + \text{C} + \text{D}) = ?$$

- A) 13 B) 14 C) 15 D) 16 E) 17

$$\frac{\text{AB} + \text{BC} + \text{CA}}{\text{AA} + \text{BB} + \text{CC}} = ?$$

- A) 1 B) 2 C) 3 D) 4 E) 5

$$\begin{array}{r} \text{AB} | 9 \\ \text{CD} | \text{A} \\ \hline 7 \end{array} \Rightarrow \max(\text{CD}) = ?$$

- A) 45 B) 54 C) 63 D) 72 E) 81

6. $\frac{AAB}{4} \left| \begin{array}{c} A \\ X \end{array} \right. \Rightarrow B + X = ?$

- A) 94 B) 104 C) 105 D) 110 E) 114

7. $\frac{4AB}{22} \left| \begin{array}{c} AB \\ 10 \end{array} \right. \Rightarrow A + B = ?$

- A) 6 B) 8 C) 10 D) 12 E) 14

8. I. $3\blacktriangle = 27, 9, 36$
 II. $4\blacktriangle = 64, 16, 80$
 III. $6\blacktriangle = 216, 36, 252$
 IV. $7\blacktriangle = ?, ?, ?$

Yukarıdaki dört eşitlikte \blacktriangle işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdaki lerden hangisi gelmelidir?

In the equations above, the function of \blacktriangle remains unchanged. What does the question mark stand for in the fourth equation?

- A) 343, 49, 84 B) 363, 49, 392
 C) 363, 49, 412 D) 343, 49, 392
 E) 343, 14, 392

9. I. $28 \times 7 = 16$

II. $36 \times 4 = 81$

III. $80 \times 10 = 64$

IV. $32 \times 2 = ?$

Yukarıdaki dört eşitlikte \times işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdaki lerden hangisi gelmelidir?

In the equations above, the function of \times remains unchanged. What does the question mark stand for in the fourth equation?

- A) 196 B) 216 C) 256 D) 296 E) 316

10. I. $27 \oplus 14 = 4$

II. $84 \oplus 9 = 27$

III. $8 \oplus 63 = 7$

IV. $14 \oplus 33 = ?$

Yukarıdaki dört eşitlikte \oplus işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdaki lerden hangisi gelmelidir?

In the equations above, the function of \oplus remains unchanged. What does the question mark stand for in the fourth equation?

- A) 16 B) 20 C) 24 D) 28 E) 32

11. I. $a \bullet b = a + a + \frac{a}{b}$

II. $a \blacktriangle b = \frac{b}{a} + a$

III. $a \blacksquare b = \frac{a}{b} + \frac{b}{a}$

III. $(2 \blacksquare 1) \blacktriangle (1 \bullet 2) = ?$

Yukarıdaki ilk üç eşitlikte \blacksquare , \blacktriangle ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare , \blacktriangle and \bullet are given.

What does the question mark stand for in the fourth equation?

- A) $\frac{5}{2}$ B) $\frac{18}{5}$ C) $\frac{20}{3}$ D) $\frac{13}{10}$ E) $\frac{31}{10}$

12. I. $\heartsuit 648 = 36$

II. $\heartsuit 549 = 36$

III. $\heartsuit 821 = 22$

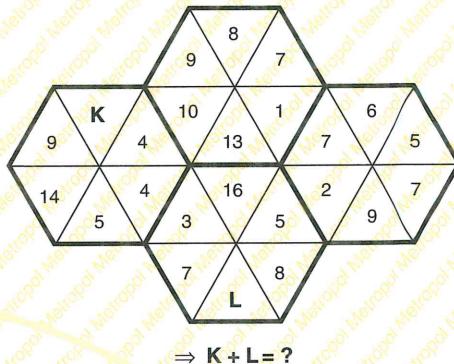
IV. $\heartsuit 437 = ?$

Yukarıdaki dört eşitlikte \heartsuit işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \heartsuit remains unchanged. What does the question mark stand for in the fourth equation?

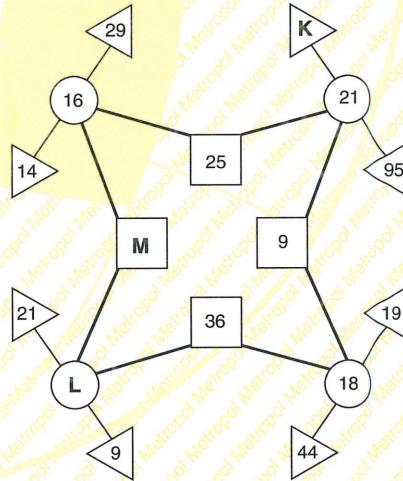
- A) 24 B) 26 C) 28 D) 30 E) 32

13.



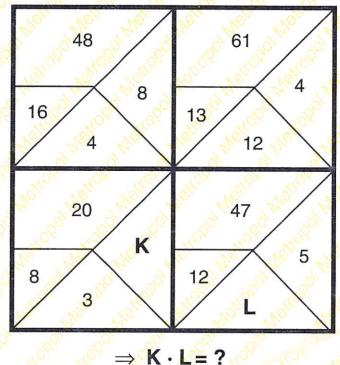
- A) 15 B) 16 C) 17 D) 18 E) 19

14.



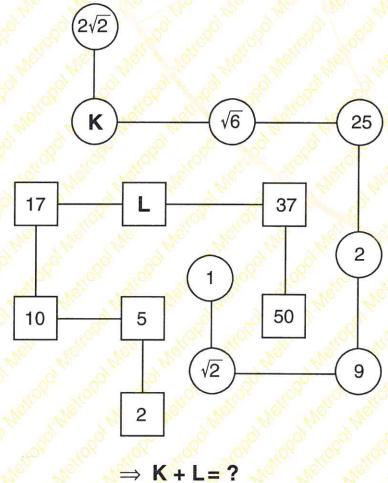
- | K | L | M |
|------|----|----|
| A) 7 | 12 | 16 |
| B) 6 | 11 | 25 |
| C) 7 | 11 | 25 |
| D) 6 | 12 | 16 |
| E) 8 | 10 | 9 |

15.



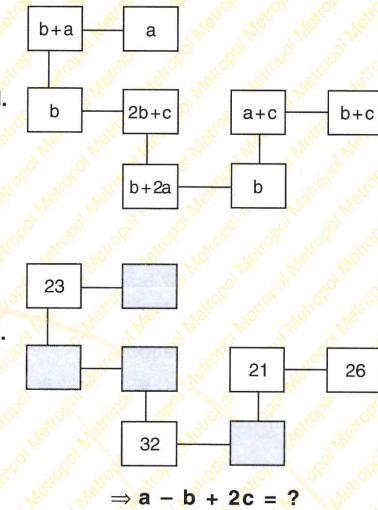
- A) 14 B) 21 C) 24 D) 28 E) 35

16.



- A) 60 B) 65 C) 70 D) 75 E) 80

17.



- A) 16 B) 17 C) 18 D) 19 E) 20

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18.

+	a	b	c
a		c+11	
b			a+15
c	b+3		

$$\Rightarrow 2a - b + c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre,

$2a - b + c$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of

$2a - b + c$?

- A) 9 B) 10 C) 11 D) 12 E) 13

19.

x	a	b	c
a		96	
b			36
c	24		

$$\Rightarrow a + b + c = ?$$

Yukarıdaki çarpma tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre

$a + b + c$ kaçtır?

In the multiplication table above, the letters m, n and k each stand for a specific number. What is the value of

$a + b + c$?

- A) 22 B) 23 C) 24 D) 25 E) 26

20.

+	a	b	c
a			2-b
b			
c			

$$\Rightarrow d + e = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b, c, d ve e harfleri belli birer sayıının yerine kullanılmıştır. Buna göre, $d + e$ kaçtır?

In the summation and multiplication tables above, the letters a, b, c, d and e each stand for a specific numeral. What is the value of $d + e$?

- A) 15 B) 16 C) 17 D) 18 E) 19

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21.

+	a	b	c
a			
b			a-4
c	b+22		

$$\Rightarrow 2a + 3b - c = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayıının yerine kullanılmıştır. Buna göre,

$2a + 3b - c$ kaçtır?

In the summation and multiplication tables above, the letters a, b ve c each stand for a specific numeral. What is the value of

$2a + 3b - c$?

- A) 36 B) 37 C) 38 D) 39 E) 40

22.

$\sqrt{+}$	a	b	c
a		$2\sqrt{3}$	
b			4
c	$2\sqrt{5}$		

$$\Rightarrow a + b + c = ?$$

Yukarıdaki kök içindeki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $a + b + c$ kaçtır?

In the square root summation table above, the letters a, b and c each stand for a specific numeral. What is the value of $a + b + c$?

- A) 24 B) 26 C) 28 D) 30 E) 32

23.

\triangle	\square	\heartsuit
○	18	20
□	14	L
○	M	24

$$\Rightarrow K + L + M = ?$$

Yukarıdaki tabloda K + L + M kaçtır?

What is the value of $K + L + M$ in table above?

- A) 57 B) 58 C) 59 D) 60 E) 61

24.

\blacktriangle	\blacksquare	\bullet
4	K	13
7	15	L
12	25	M

$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloda K, L ve M nin yerine hangi sayılar gelmelidir?

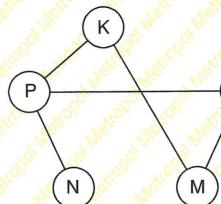
Which numbers do K, L and M stand for in the table above?

K	L	M
A) 8	22	47
B) 9	20	49
C) 9	21	47
D) 8	21	48
E) 9	22	49

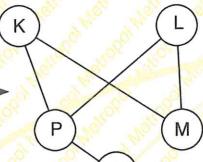
Deneme Sınavı 9

25. ve 26. soruları örnekte verilen ilişkiye göre cevaplayınız.

In questions 25 –26, find the correct answer in accordance with the relationship established in the example below.

ÖRNEK / EXAMPLE:

Şekil I
Figure I



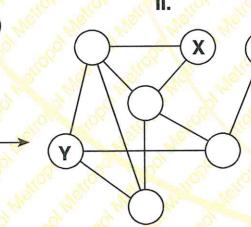
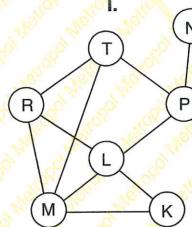
Şekil II
Figure II

K, L, M, N ve P harfleri I. şekildeki gibi birbirine bağlanmıştır.

I. şekildeki bağlantı sayıları ve birbirine bağlanan harfler değişmemek koşuluyla II. şekilde edilmiştir.

Letters K, L, M, N and P are linked as in Figure I. Figure II has been constructed so as not to change which letters are linked to which, and the number of links made with each letter, in Figure I.

25.

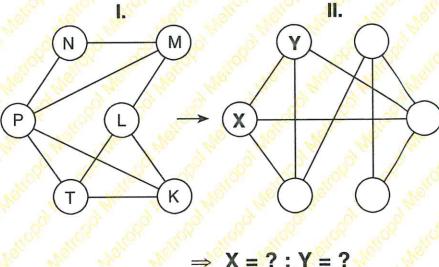


$\Rightarrow X = ? ; Y = ?$

- | X | Y |
|------|---|
| A) K | M |
| B) L | T |
| C) R | P |
| D) R | M |
| E) K | T |

- | X | Y |
|---|---|
| * | * |
| * | * |
| * | * |
| * | * |
| * | * |

26.



$\Rightarrow X = ? ; Y = ?$

- | X | Y |
|------|---|
| A) T | L |
| B) P | N |
| C) P | M |
| D) K | L |
| E) T | K |

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27.

⌘	*	*	☒	✡	□
*	☒	✡	□	*	*
*	✡	□	*	☒	*
☒	□	*	*	☒	✡
✡	*	☒	☒	*	☒
□	*	*	✡	☒	✡

$$* \text{⌘} ((\text{☒} \text{⌘} ?) \text{⌘} *) \text{⌘} \square = \square$$

Yukarıdaki tabloya göre soru işaretinin yerine hangi şekil gelmelidir?

Which figures do question mark stand for in the table above?

- | | | |
|------|------|------|
| A) □ | B) ✡ | C) ☒ |
| D) * | E) * | |

28.

I	2	K	4
II	L	4	2
III	2	1	M

$$\Rightarrow K + L + M = ?$$

Yukarıdaki tabloya göre K + L + M kaçtır?

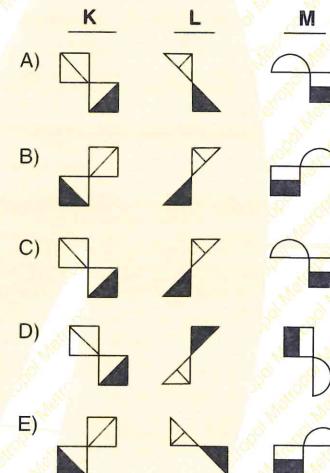
What is the value of $K + L + M$ in table above?
 A) 4 B) 5 C) 6 D) 7 E) 8

29.

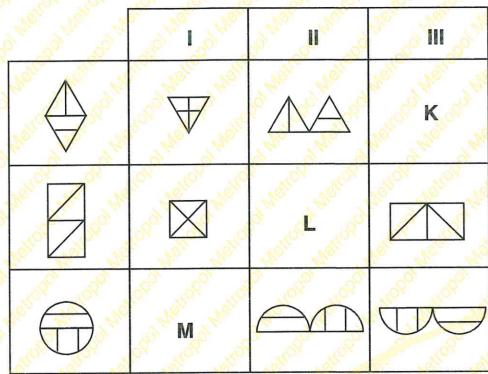
I	K		
II		L	
III			M

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



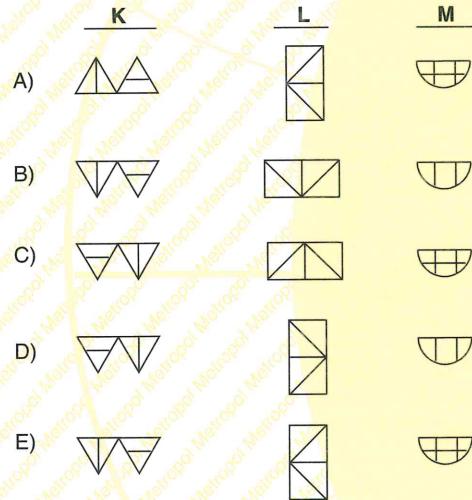
30.



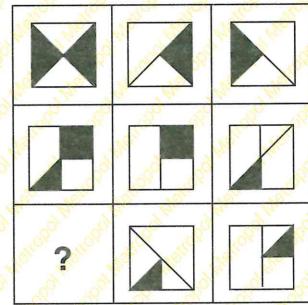
$$\Rightarrow K = ?; L = ?; M = ?$$

Yukarıdaki tabloya göre K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M question mark stand for in the table above?



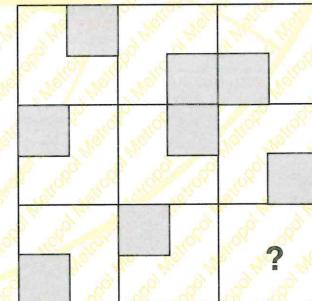
31.



- A)
- B)
- C)
- D)
- E)

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32.



- A)
- B)
- C)
- D)
- E)

33.



II.



A)



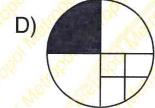
B)



C)



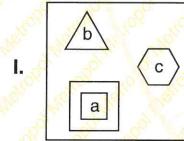
D)



E)

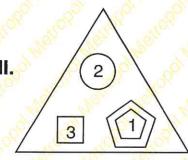


34.



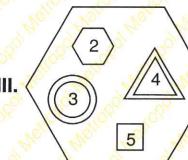
$$\Rightarrow ((a + 4 + 4) + (c + 6) + (b + 3)) + 4$$

II.



$$\Rightarrow ((2)^2 + (3 + 4) + (1 + 5 + 5)) + 3$$

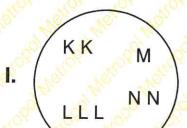
III.



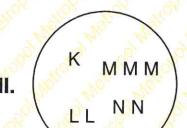
$$\Rightarrow ?$$

- A) 113 B) 114 C) 115 D) 116 E) 117

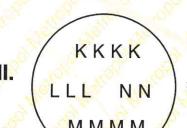
35.



$$\Rightarrow 2, 1, 3, 2$$



$$\Rightarrow 2, 3, 2, 1$$



$$\Rightarrow ?, ?, ?, ?$$

A) 2, 3, 4, 4

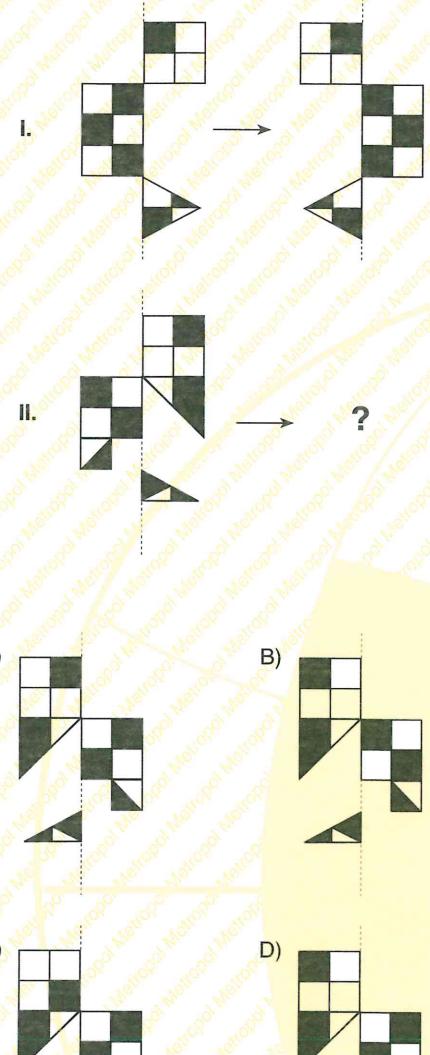
B) 3, 2, 4, 4

C) 2, 4, 4, 3

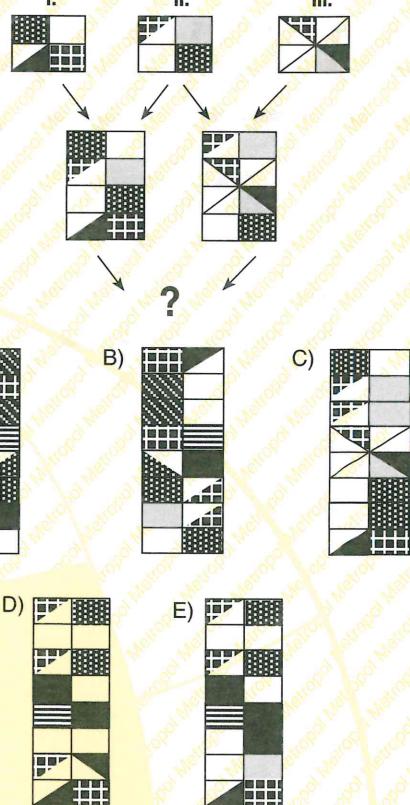
D) 2, 4, 3, 4

E) 3, 4, 2, 4

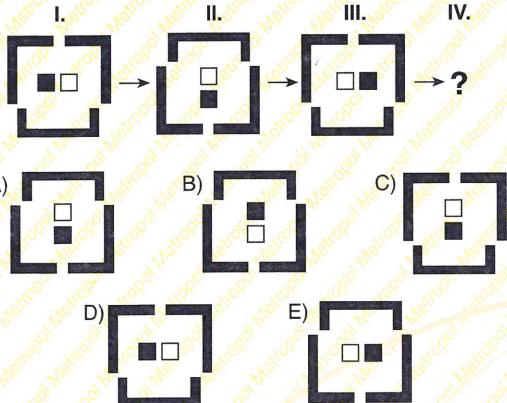
36.



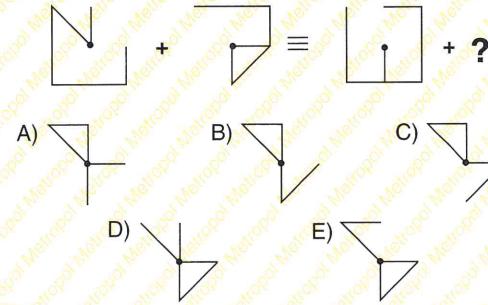
37.



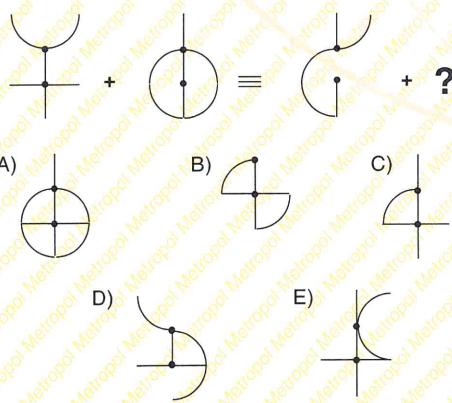
38.



40.

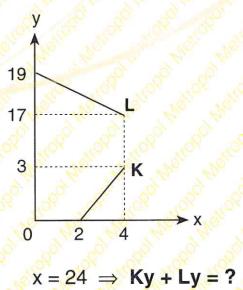


39.



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41.



A) 37

B) 38

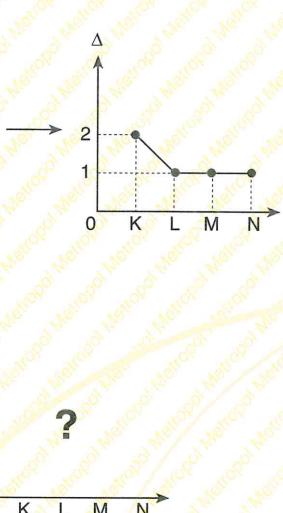
C) 39

D) 40

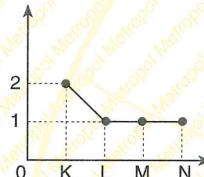
E) 41

42.

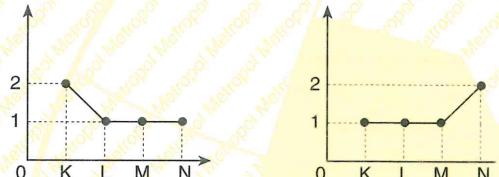
K	L	M	N
Δ	■	□	■
□	●	△	□
Δ	△	□	△
●	●	●	●
■	□	■	●



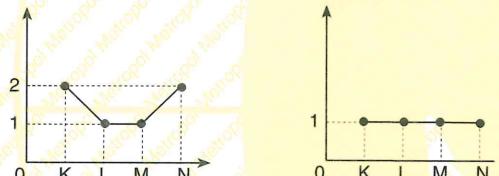
A)



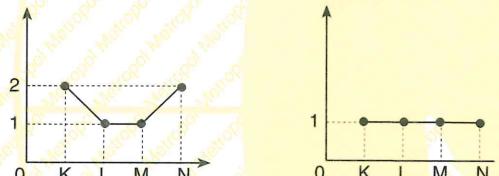
B)



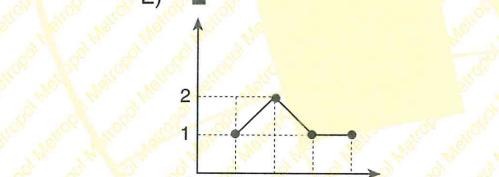
C)



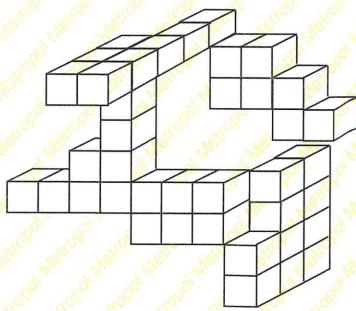
D)



E)



43.

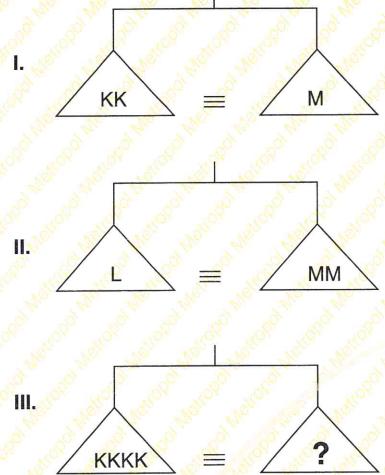


Yukarıdaki şekilde kaç tane küp vardır?

How many cubes are there in given shape?

- A) 38 B) 39 C) 40 D) 41 E) 42

44.

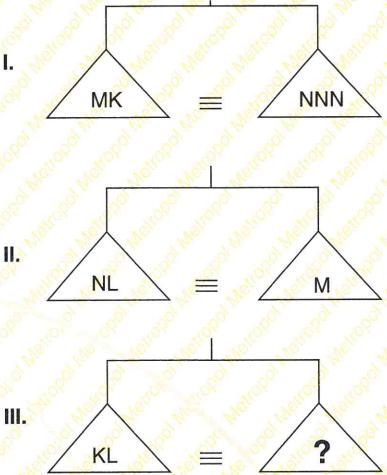


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) L B) LL C) LLL
D) LLLL E) LLLLL

45.



I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen küteler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) N B) NN C) NNN
D) NNNN E) NNNNN

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YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
A	C	D	A	B	E	A	D	C
10	11	12	13	14	15	16	17	18
D	E	C	E	A	D	D	D	B
19	20	21	22	23	24	25	26	27
B	B	B	A	D	E	E	E	E
28	29	30	31	32	33	34	35	36
C	B	C	C	E	C	B	D	D
37	38	39	40	41	42	43	44	45
C	B	D	C	D	D	B	A	B

1. ve 4. sorularda, I. gruptaki kümelerin şekilleri harfleri ve sayıları birer rakamla, şekiller veya harfle gösterilerek II. gruptaki sayılar, şekiller veya kelimeler elde edilmiştir. Soru işaretiley belirtilen kümeyi hangi sayıyla, şekiller veya kelimeyle gösterildiğini bulunuz.

In questions 1 and 4, the numbers, figures or words in group I stand for the sets of figures, letters or numbers, in group II, when each figure, numeral or letter has been coded with a specific numeral, figure or letter. Find the number, figure or word which corresponds to the set of the figures, numerals or numbers indicated by the question mark.

B İ B E R	2 1 2 4 3
Ü Ç L E R	7 8 5 4 3
E R L E R	4 3 5 4 3
K İ R L E	6 1 3 5 4
B E K L E	2 4 6 5 4

- A) 21243 B) 78543 C) 43543
 D) 61354 E) 24654

Δ ○ □ * ○	1 2 3 4 2
○ □ * ○ Δ	2 3 4 2 1
□ * ○ Δ ○	3 4 2 1 2
* ○ Δ ○ □	4 2 1 2 3
○ Δ ○ □ *	2 1 2 3 4

- A) 42343 B) 42313 C) 23414
 D) 31242 E) 24313

$$\left. \begin{array}{l} \Delta + \circ \times \square \blacksquare \\ \odot \bullet \rightarrow \times \star + \\ \square \triangle \downarrow \leftarrow \times \\ \star + \bullet \odot \odot \blacksquare \triangle \\ \leftarrow \odot \square \rightarrow \times + \end{array} \right\} \Rightarrow \star + \bullet \odot \odot \blacksquare \triangle = ?$$

- A) PKEMHC B) UİZROE C) HRKSCI
 D) EİBCKO E) RZSCUI

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$$\left. \begin{array}{l} \star \square + \times \circ \blacksquare \\ \square \nabla \circ \blacktriangle \downarrow \nabla \\ \uparrow \blacktriangledown \blacksquare \bullet \star \nabla \\ + \uparrow \square \blacksquare \uparrow \star \\ \blacksquare \nabla \triangle \odot \downarrow \square \end{array} \right\} \Rightarrow + \uparrow \square \blacksquare \uparrow \star = ?$$

- A) SGOIGM B) YVZWTO C) OVWZTV
 D) GDYPMV E) MOSCWI

5. I. $14 \odot 5 = 23$
 II. $8 \odot 12 = 4$
 III. $10 \odot 7 = 13$
 IV. $9 \odot 5 = ?$

Yukarıdaki dört eşitlikte \odot işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \odot remains unchanged. What does the question mark stand for in the fourth equation?

- A) 12 B) 13 C) 14 D) 15 E) 16

6. I. $\odot 947 = 29$
 II. $\odot 685 = 43$
 III. $\odot 936 = 21$
 IV. $\odot 294 = ?$

Yukarıdaki dört eşitlikte \odot işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \odot remains unchanged. What does the question mark stand for in the fourth equation?

- A) 13 B) 14 C) 15 D) 16 E) 17

7. $a \blacktriangle b = \begin{cases} a+b, & a < b \\ a-b, & a = b \\ 2b, & a > b \end{cases}$

II. $(-2 \blacktriangle 2) + (3 \blacktriangle 2) = ?$

Yukarıdaki ilk eşitlikte \blacktriangle işaretinin görevi verilmiştir. Buna göre, ikinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of \blacktriangle remains unchanged. What does the question mark stand for in the second equation?

- A) 3 B) 4 C) 5 D) 6 E) 7

8. I. $a \blacksquare b = 3a + b$
 II. $a \bullet b = 2a - b$
 III. $a \blacktriangle b = a + 4b$
 IV. $((4 \bullet 2) \blacktriangle 3) \blacksquare 5 = ?$

Yukarıdaki ilk üç eşitlikte \blacksquare , \blacktriangle ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare , \blacktriangle and \bullet are given. What does the question mark stand for in the fourth equation?

- A) 57 B) 58 C) 59 D) 60 E) 61

Deneme Sınavı 10

9. I. $a^3 \blacksquare b^2 = a + 2b$

II. $3a \bullet 2b = a^2 + b$

III. $a \blacktriangle b = a + b + 4$

IV. $(64 \blacksquare 36) \blacktriangle (15 \bullet 16) = ?$

Yukarıdaki ilk üç eşitlikte \blacksquare , \blacktriangle ve \bullet işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \blacksquare , \blacktriangle and \bullet are given. What does the question mark stand for in the fourth equation?

- A) 52 B) 53 C) 54 D) 55 E) 56

10. I. $a \heartsuit b = a \odot 2b$

II. $a \blacktriangle b = \frac{a}{2} \bullet b$

III. $a \odot b = 2 - a \blacktriangle \frac{b}{2}$

IV. $a \bullet b = a + b$

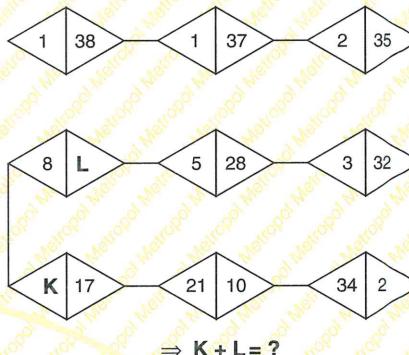
V. $(1 \odot 2) \heartsuit (4 \blacktriangle 3) = ?$

Yukarıdaki ilk dört eşitlikte \heartsuit , \bullet , \blacktriangle ve \odot işaretlerinin görevleri verilmiştir. Buna göre, beşinci eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of \heartsuit , \bullet , \blacktriangle and \odot are given. What does the question mark stand for in the fifth equation?

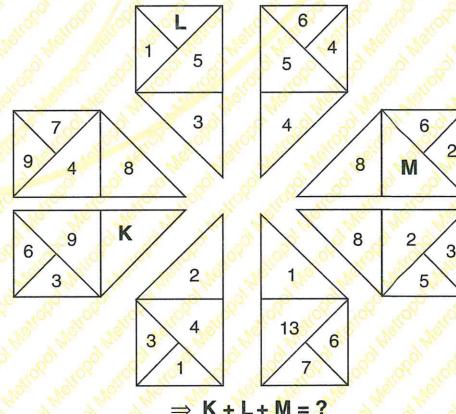
- A) 4 B) 5 C) 6 D) 7 E) 8

11.



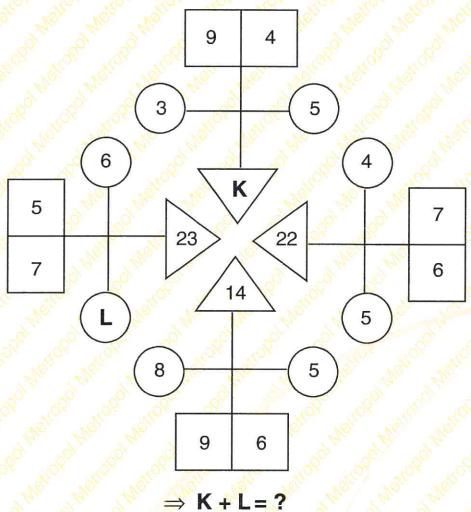
- A) 33 B) 34 C) 35 D) 36 E) 37

12.



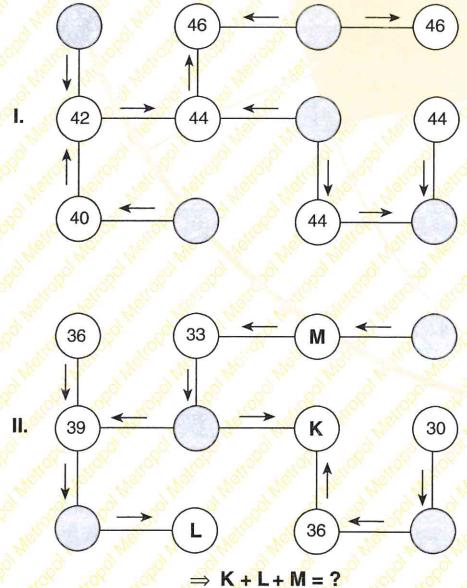
- A) 8 B) 9 C) 10 D) 11 E) 12

13.



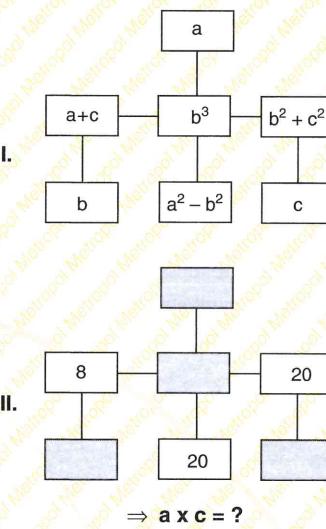
- A) 21 B) 22 C) 23 D) 24 E) 25

14.



- A) 111 B) 112 C) 113 D) 114 E) 115

15.



- A) 24 B) 18 C) 16 D) 12 E) 8

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16.

+	a	b	c
a		c+4	
b			a+8
c	b+12		

$$\Rightarrow a + b + c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $a + b + c$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of

$$a + b + c?$$

- A) 16 B) 18 C) 20 D) 22 E) 24

17.

+	a	b	c
a		c+2	
b			a+16
c	3-a		

$$\Rightarrow a + b - c = ?$$

Yukarıdaki toplama tablosunda a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $a + b - c$ kaçtır?

In the summation table above, the letters a, b and c each stand for a specific numeral. What is the value of

$$a + b - c?$$

- A) 1 B) 2 C) 3 D) 4 E) 5

18.

x	a	b
c		13
d		

$$\Rightarrow d + a = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b, c ve d harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $d + a$ kaçtır?

In the summation and multiplication tables above, the letters a, b, c and d each stand for a specific numeral. What is the value of $d + a$?

- A) 23 B) 24 C) 25 D) 26 E) 27

19.

x	a	b	c
a		c^2	
b			
c			36

+	a	b	c
a		13	
b			

$$a > b \Rightarrow a - b + c = ?$$

Yukarıdaki toplama ve çarpma tablolarında a, b ve c harfleri belli birer sayının yerine kullanılmıştır. Buna göre, $a - b + c$ kaçtır?

In the summation and multiplication tables above, the letters a, b and c each stand for a specific numeral. What is the value of $a - b + c$?

- A) 1 B) 7 C) 11 D) 14 E) 19

20.

▲	a	b	c
a	e	c	d
b	c	f	a
c	d	a	b

●	d	e	f
d	a	b	d
e	b	c	b
f	d	b	d

$$\Rightarrow ((a \blacktriangle b) \blacktriangle (d \bullet e)) \blacktriangle c = ?$$

Yukarıdaki tabloda ▲ ve ● işlemlerinin kuralları verilmiştir. Buna göre, $((a \blacktriangle b) \blacktriangle (d \bullet e)) \blacktriangle c$ kaçtır?

According to the rules of ▲ and ● operation established in the table above, what is the value of $((a \blacktriangle b) \blacktriangle (d \bullet e)) \blacktriangle c$?

- A) a B) b C) c D) d E) e

21.

●	4	7	5
9	8	2	1
6	5	7	4
3	6	4	5

$$\Rightarrow ((9 \bullet 7) \blacktriangle 4) \bullet 3 = ?$$

Yukarıdaki tabloda ▲ ve ● işlemlerinin kuralları verilmiştir.

Buna göre, $((9 \bullet 7) \blacktriangle 4) \bullet 3 = ?$ kaçtır?

According to the rules of ▲ and ● operation established in the table above, what is the value of $((9 \bullet 7) \blacktriangle 4) \bullet 3 = ?$

- A) 2 B) 4 C) 6 D) 7 E) 9

22.

*	4	5	6	3
7	1	2	3	—
5	9	K	1	2
2	6	7	L	5
9	3	4	5	2
6	—	1	0	M

$$\Rightarrow K = ?$$

$$\Rightarrow L = ?$$

$$\Rightarrow M = ?$$

Yukarıdaki tabloda K, L ve M nin yerine hangi sayılar gelmelidir?

Which numbers do K, L and M stand for in the table above?

- A) 10, 8, 9 B) —, 8, 3 C) 0, 4, 9
D) 0, —, 3 E) —, 8, 9

23.

4	5	6	9
6	9	3	5
7	1	6	4
13	15	?	12

Yukarıdaki tabloda soru işaretinin yerine hangi sayı gelmesi正确？

Which number do question mark stand for in the table above?

- A) 14 B) 15 C) 16 D) 17 E) 18

24.

*	K	L	M	N	R
K	R	M	K	L	N
L	M	R	R	N	N
M	K	R	M	L	K
N	L	N	L	K	M
R	N	N	K	M	N

$\Rightarrow [(K * X) * (R * M)] * R = K$

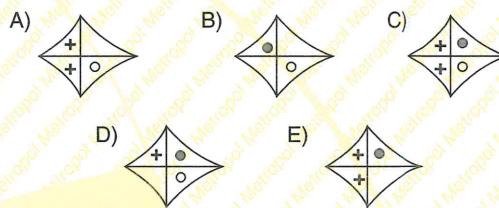
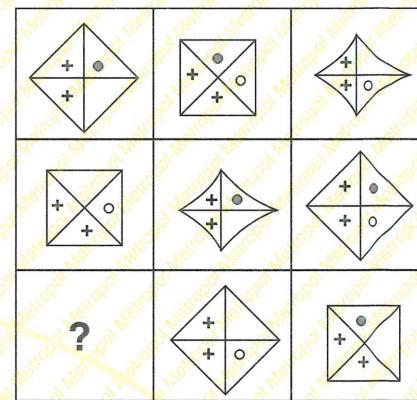
Yukarıdaki tabloda $*$ işleminin kuralı verilmiştir. Buna göre,

X nedir？

According to the rules of $*$ operation established in the table above, what is the value of X ?

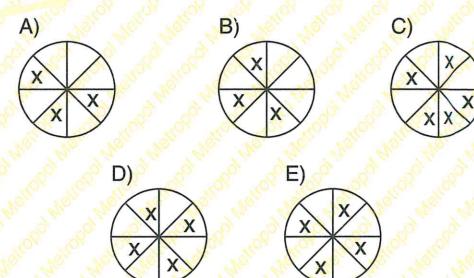
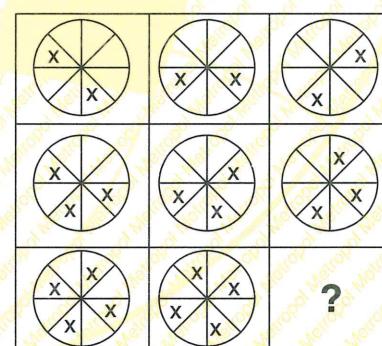
- A) K B) L C) R D) M E) N

25.

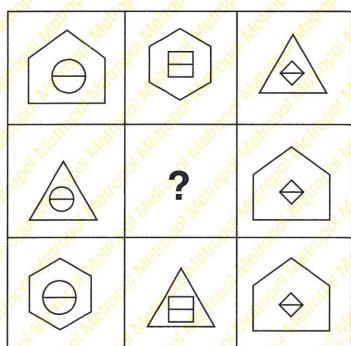


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26.

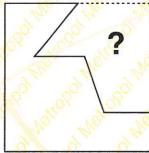


27.



- A) B) C) D) E)

28.



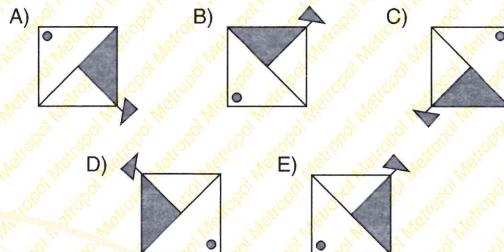
Yukarıdaki şekli aşağıdaki parçalardan hangisi bir kareye tamamlayır?

Which of the following will make the above figure into a square?

- A) B) C) D) E)

29. Aşağıdaki şekillerden hangisi farklıdır?

Which of the following figure is different from others?

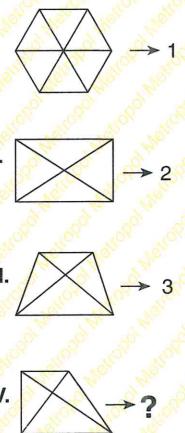


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30.

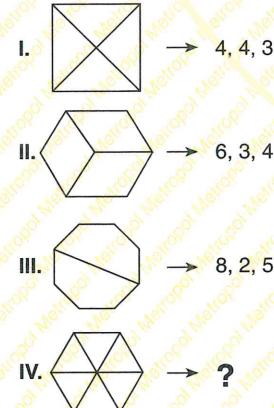
- I. →
- II. →
- III. →
- IV. → ?
- A) B) C) D) E)

31.



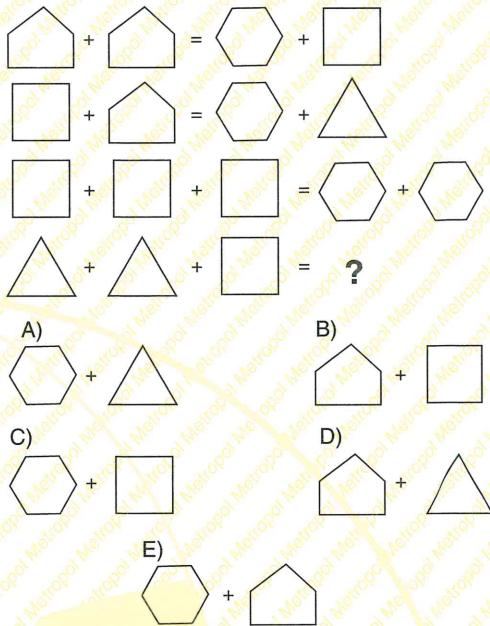
- A) 1 B) 2 C) 3 D) 4 E) 5

32.



- A) 6, 6, 3 B) 8, 5, 4 C) 6, 6, 6
D) 8, 4, 3 E) 6, 2, 2

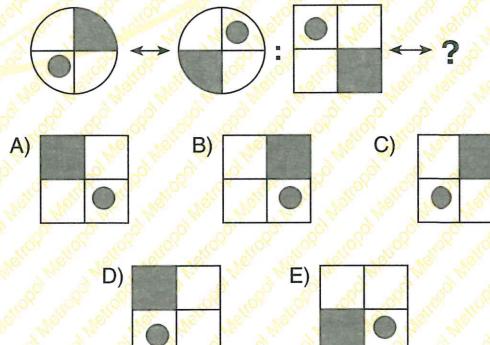
33.



- A) $\text{hexagon} + \text{triangle}$
B) $\text{pentagon} + \text{square}$
C) $\text{hexagon} + \text{square}$
D) $\text{pentagon} + \text{triangle}$
E) $\text{hexagon} + \text{pentagon}$

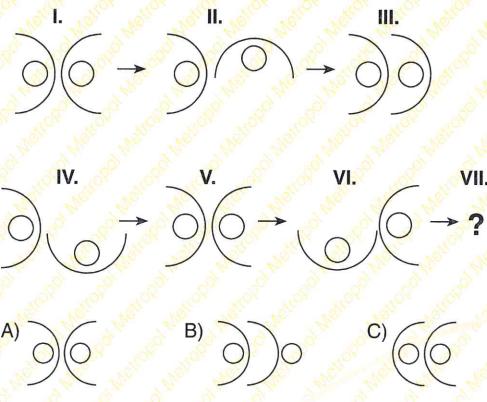
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34.



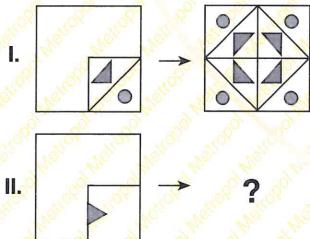
- A)
- B)
- C)
- D)
- E)

35.



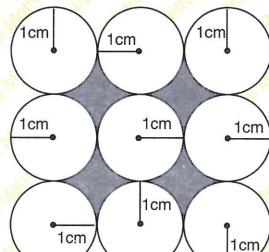
- A) B) C)
 D) E)

36.



- A) B) C)
 D) E)

37.

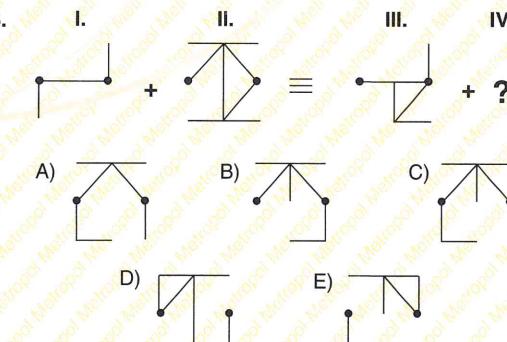


- A) $16 - 4\pi$ B) $4 - 3\pi$ C) $16 - \pi$
 D) $4 - \pi$ E) $16 - 3\pi$

Taralı Alan = ? (cm²)
 Shaded area = ? (cm²)

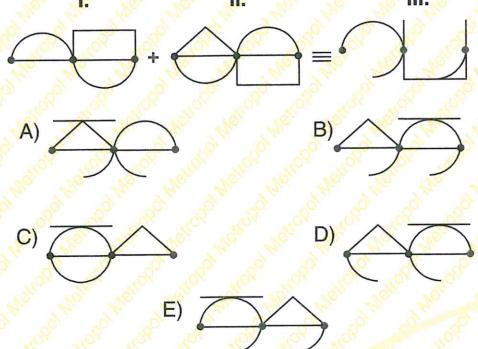
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38.



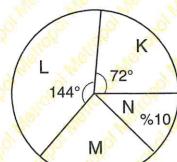
- A) B) C)
 D) E)

39. I. II. III. IV.



- A)
 B)
 C)
 D)
 E)

41.



A)

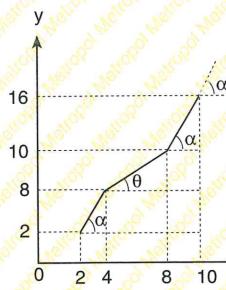
B)

C)

D)

E)

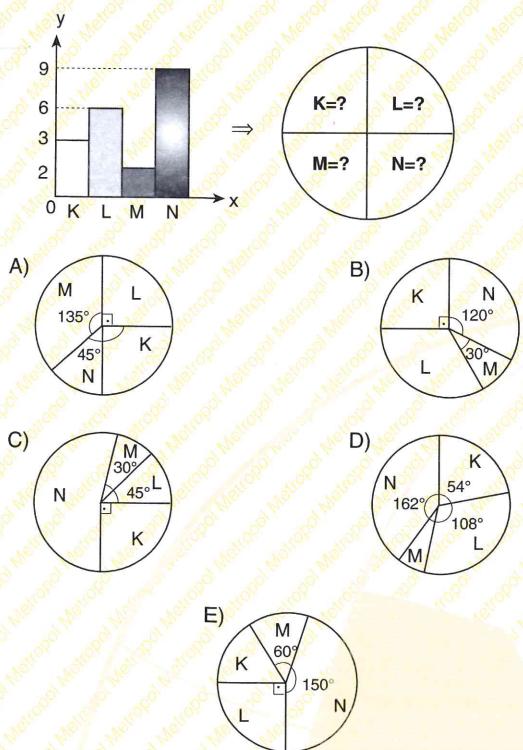
40.



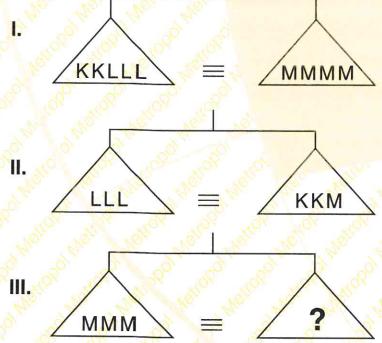
$$\begin{aligned}x &= 48 \Rightarrow y = K \\y &= 64 \Rightarrow x = L \\&\Rightarrow K + L = ?\end{aligned}$$

- A) 152 B) 154 C) 156 D) 158 E) 160

42.



43.

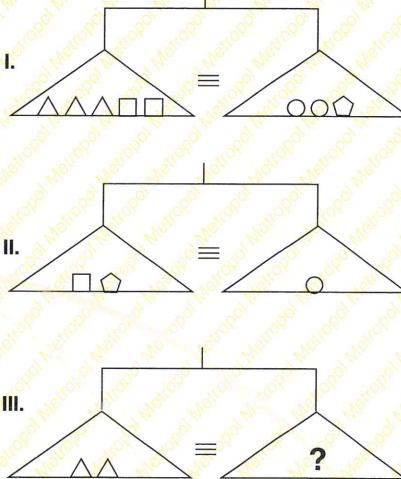


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen kütleler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) K B) KK C) KKK
D) KKKK E) KKKKK

44.

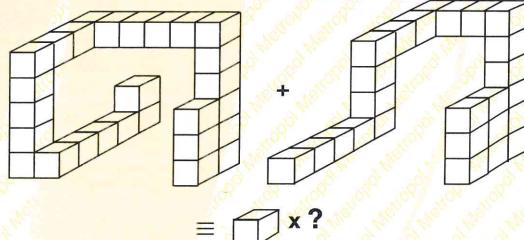


I. ve II. eşit kollu teraziler dengede olduğuna göre, III. terazinin boş kefesine aşağıdakilerin hangisinde verilen kütleler konulursa terazi dengeye gelir?

In accordance with I and II, which group of the masses below, when placed on the empty tray in III, will make the scale balance?

- A) B) C)
D) E)

45.



Yukarıdaki şekilde kaç tane Küp vardır?

How many cubes are there in given shape?

- A) 48 B) 49 C) 50 D) 51 E) 52



YANITLAR / ANSWERS

1	2	3	4	5	6	7	8	9
E	E	B	A	B	B	B	C	B
10	11	12	13	14	15	16	17	18
D	D	D	C	D	D	E	B	D
19	20	21	22	23	24	25	26	27
C	D	B	B	B	E	C	E	B
28	29	30	31	32	33	34	35	36
B	E	E	D	A	C	A	C	C
37	38	39	40	41	42	43	44	45
A	C	D	C	D	D	D	D	E