Bu testte 40 soru vardır.

This test consists of 40 questions.

1. I. gruptaki sözcüklerin harfleri farklı birer sembolle gösterilerek II. gruptaki semboller elde edilmiştir. Soru işareti ile belirtilen sözcüğün hangi sembollerle gösterildiğini bulunuz.

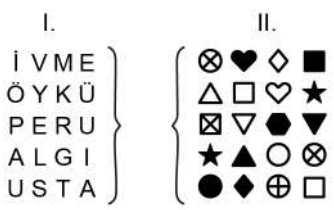
When each letter is coded with a different specific symbol, the symbols in group II stand for the words in group I. Find the set of symbols which correspond to the word indicated by the question mark.

Jeder Buchstabe in der I. Gruppe steht für eine bestimmte Figur. Gleiche Buchstaben bedeuten gleiche Figuren. Unterschiedliche Buchstaben bedeuten unterschiedliche Figuren. Daraus ergeben sich die Figurenreihen in der II. Gruppe. Welche Figurenreihe muss demnach das Fragezeichen ersetzen?

En remplaçant chaque lettre des mots du groupe I par une figure différente, on obtient ainsi les figures du groupe II. D'après ces données, trouvez la série de figures qui correspond au mot indiqué par le point d'interrogation.

Буквы, из которых состоят слова в I-ой группе, обозначены разными символами. Из них получены символы, приведённые во II-ой группе.
Какие символы нужно поставить вместо «?»?

تم الحصول على الأعداد في المجموعة II بتوضيح أحرف الكلمات في المجموعة I برمز مختلف لكل حرف. وبناء عليه، أوجد الرموز التي تشير إلى الكلمة المبينة بعلامة الاستفهام (؟).



AKTÖR → ?

A) ⊗ ● ○ ⊠ ♡ B) ⊗ ● ♡ ▼ ○

C) ■ ● ◇ ⊠ ○ D) ■ ◇ ⊕ ★ ♡

E) ★ ◇ ♥ ● ⊕

2. I. gruptaki sözcüklerin harfleri farklı birer rakamla gösterilerek II. gruptaki sayılar elde edilmiştir. Soru işareti ile belirtilen sözcüğün hangi sayıyla gösterildiğini bulunuz.

When each letter is coded with a different specific numeral, the numbers in group II stand for the words in group I. Find the number which corresponds to the word indicated by the question mark.

Jeder Buchstabe in der I. Gruppe steht für eine bestimmte Ziffer. Gleiche Buchstaben bedeuten gleiche Ziffern. Unterschiedliche Buchstaben bedeuten unterschiedliche Ziffern. Daraus ergeben sich die Zahlen in der II. Gruppe. Welche Zahl muss demnach das Fragezeichen ersetzen?

En remplaçant chaque lettre des mots du groupe I par un chiffre différent, on obtient ainsi les nombres du groupe II. D'après ces données, trouvez le nombre qui correspond au mot indiqué par le point d'interrogation.

Буквы, из которых состоят слова, в I-ой группе обозначают разные цифры. Из этих цифр получены числа, приведённые во II-ой группе. Какое число нужно поставить вместо «?»?

تم الحصول على الأعداد في المجموعة II بتوضيح أحرف الكلمات في المجموعة I برقم مختلف لكل حرف. وبناء عليه، أوجد العدد الذي يشير إلى الكلمة المبينة بعلامة الاستفهام (؟).

OLSAM → ?

A) 42876 B) 46874 C) 52814

D) 52874 E) 56478

Diğer sayfaya geçiniz.
Go on to the next page.

3. a, b, c pozitif gerçel (reel) sayılardır. Aşağıdaki tablolarda toplama (+) ve çarpma (x) işlemleri verilmiştir.

a, b and c are positive real numbers. In the tables below, there are addition (+) and multiplication (x) operations.

a, b und c sind positive reelle Zahlen. In den Tabellen unten sind Addition (+) und Multiplikation (x) angegeben.

a, b, c sont des nombres réels positifs. Dans les tableaux ci-dessous, les opérations d'addition (+) et de multiplication (x) nous ont été données.

a, b и c обозначают положительные действительные числа. В таблицах приведены действия сложения (+) и умножения (x).

كل من a ، b و c عدد حقيقي موجب (reel). تم إعطاء عملية جمع (+) وضرب (x) الأعداد في الجدولين التاليين.

+	a	b	c
a	4x		
b		y	
c			$\frac{z}{3}$

x	a	b	c
a	x		
b		y	
c			z

$\Rightarrow \mathbf{x \cdot y \cdot z} = ?$

A) 12 B) 18 C) 24 D) 30 E) 36

4. a, b, c pozitif tam sayılardır. Aşağıdaki tabloda çarpma (x) işlemi verilmiştir.

a, b, c are positive integers. In the table below, there is multiplication (x) operation.

a, b, c sind positive ganze Zahlen. In der Tabelle unten ist Multiplikation (x) angegeben.

a, b, c sont des nombres entiers positifs. Dans le tableau ci-dessous, l'opération de multiplication (x) nous a été donnée.

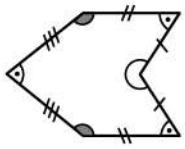
a, b, c обозначают целые положительные числа. В таблице ниже приведено действие умножения (x).

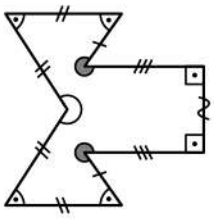
كل من a ، b و c عدد صحيح موجب. تم إعطاء عملية ضرب (x) في الجدول التالي.

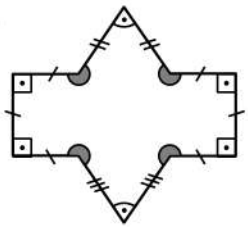
×	a	b	c
a			9b
b	c		
c		4a	

$\Rightarrow \mathbf{a + b + c} = ?$

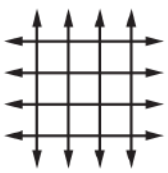
A) 8 B) 9 C) 10 D) 11 E) 12

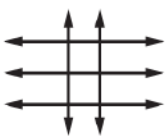
5. I.  → (3•2•1)+(2•2•2)=14

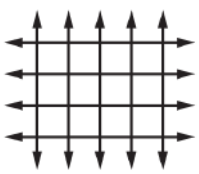
II.  → (4•2•2•1)+(4•2•2•1)=32

III.  → ?

A) 16 B) 24 C) 32 D) 44 E) 56

6. I.  → 4;9;16;4

II.  → 2;2;6;3

III.  → ?

A) 4; 8; 16; 4 B) 4; 8; 24; 5 C) 4; 12; 20; 5

D) 5; 12; 20; 4 E) 5; 16; 20; 4

7.
- 8 → 421
- 12 → 64321
- 17 → 1
- 21 → 731

⇒ **15** →?

A) 351 B) 531 C) 652 D) 871 E) 942

Diğer sayfaya geçiniz.
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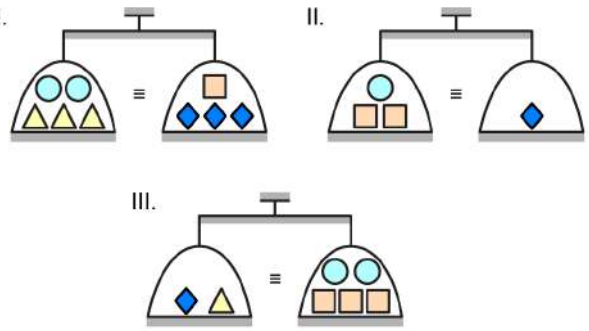
8. I. II. III.



Yukarıdaki terazilerin üçü de dengededir.

All three scales above are balanced.

Die drei Waagen in der obigen Abbildung sind alle im Gleichgewicht.

Les trois balances ci-dessus sont en équilibre.

Все весы, изображённые выше, находятся в состоянии равновесия.

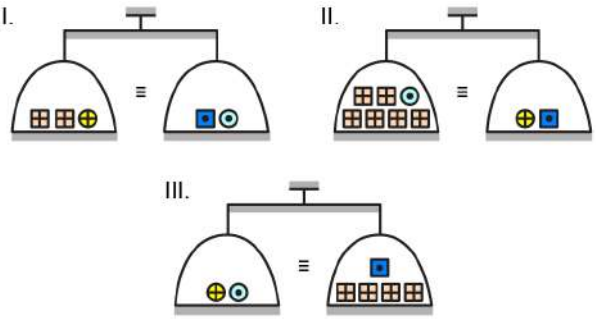
الموازين الثلاثة أعلاه متوازنة.

$\Rightarrow \frac{\blacklozenge + \bigcirc}{\triangle + \square} = ?$

A) $\frac{1}{2}$ B) $\frac{3}{2}$ C) $\frac{1}{3}$

D) $\frac{4}{3}$ E) $\frac{5}{4}$

9. I. II. III.



Yukarıdaki terazilerin üçü de dengededir.

All three scales above are balanced.

Die drei Waagen in der obigen Abbildung sind alle im Gleichgewicht.

Les trois balances ci-dessus sont en équilibre.

Все весы, изображённые выше, находятся в состоянии равновесия.

الموازين الثلاثة أعلاه متوازنة.

$\Rightarrow$?<?<?<?

A) ⊙ < ⊞ < ⊕ < ⊡ B) ⊡ < ⊞ < ⊕ < ⊙

C) ⊞ < ⊙ < ⊕ < ⊡ D) ⊙ < ⊞ < ⊡ < ⊕

E) ⊞ < ⊙ < ⊡ < ⊕

Diğer sayfaya geçiniz.
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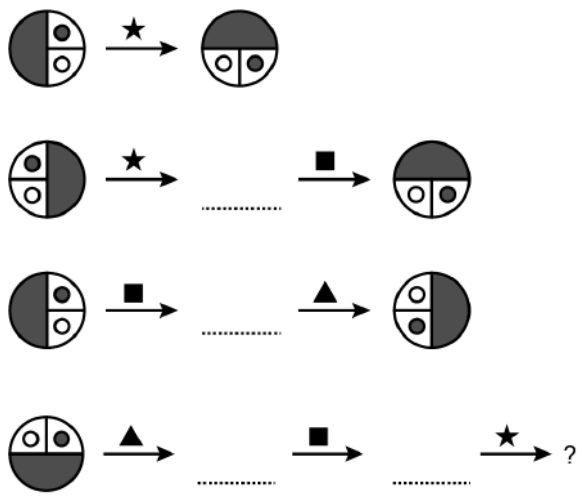
10.



A)
B)
C)
D)
E)

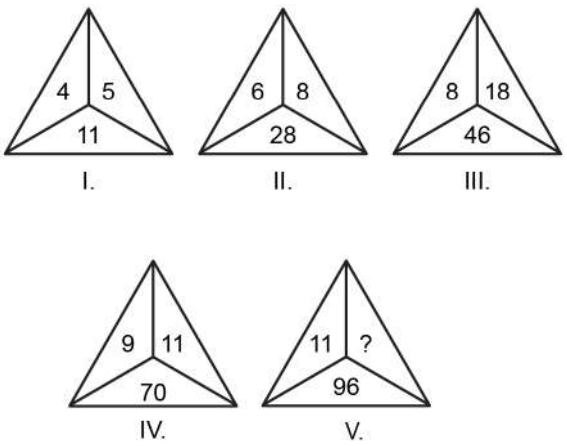
11.

8	12	9	9	6	10
9	14	10	10	6	11
11	15	9	13	7	11
12	17	16	8	7	12
10	22	19	7	4	16
15	A	18	B	8	13

$\Rightarrow \mathbf{A} + \mathbf{B} = ?$

A) 17 B) 20 C) 23 D) 27 E) 30

12.



A) 13 B) 19 C) 25 D) 37 E) 43

Diğer sayfaya geçiniz.
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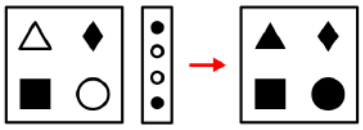
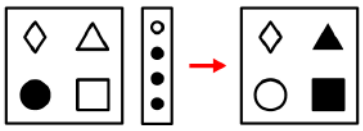
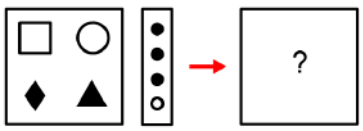
13. I.



II.



III.



A)

B)

C)

D)

E)

14 - 15. soruları örnekte verilen ilişkiye göre cevaplayınız.

Answer questions 14 - 15 according to the relation given in the example.

Lösen Sie die Aufgaben 14 - 15 nach der Relation im Beispiel.

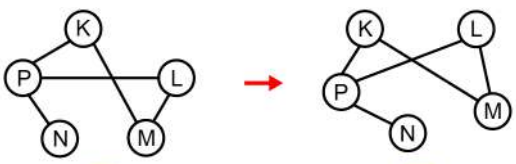
Répondez aux questions 14 - 15 à l'aide de la relation établie dans l'exemple donné.

Ответьте на вопросы 14 - 15 в соответствии с закономерностью, которая прослеживается в данном образце.

أجب عن السؤالين 14 - 15 حسب العلاقة المعطاة في المثال.

ÖRNEK:
EXAMPLE:
BEISPIEL:
EXEMPLE:
ОБРАЗЕЦ:

مثال:



K, L, M, N ve P harfleri I. şekildeki gibi birbirine bağlanmıştır. I. şekildeki bağlantı sayıları ve birbirine bağlanan harfler değişmemek koşuluyla II. şekil elde edilmiştir.

Letters K, L, M, N and P are connected together as in Figure I. Figure II is obtained without changing the number of connections and the letters connected to each other in Figure I.

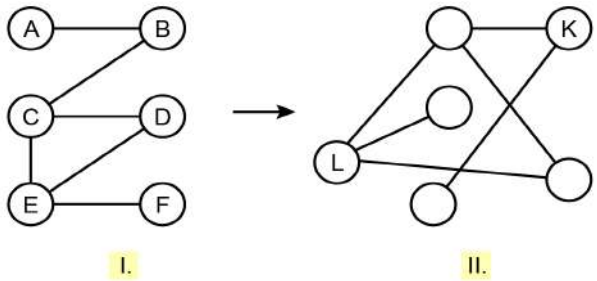
Die Buchstaben K, L, M, N und P sind wie in der I. Figur miteinander verbunden. Die II. Figur entsteht unter der Bedingung, dass sich die Anzahl der Verbindungen in der I. Figur und die Buchstabenverbindungen nicht ändern.

Les lettres K, L, M, N et P sont liées comme indiqué dans le schéma I. Sans changer le nombre de liaisons et les lettres se liant les unes aux autres du schéma I, on obtient le schéma II.

Между буквами K, L, M, N и P существует связь как в I-ой фигуре. Не изменяя количества связей и букв, связанных между собой в I-ой фигуре, получена II-ая фигура.

الحروف K ، L ، M ، N و P مرتبطة ببعضها حسب الشكل I. تم الحصول على الشكل II بأعداد الروابط في الشكل I والحروف المرتبطة بها بشرط عدم تغييرها.

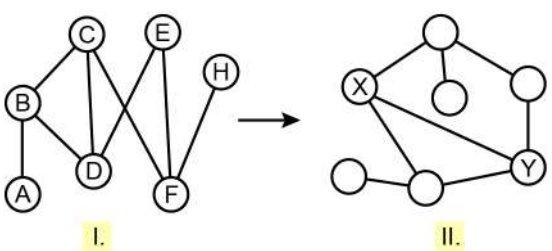
14.



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

A) K = A, L = E
B) K = B, L = E
C) K = C, L = F
D) K = D, L = A
E) K = B, L = D

15.



$\Rightarrow$ **X** = ?, **Y** = ?

A) X = B, Y = C
B) X = B, Y = D
C) X = C, Y = D
D) X = C, Y = F
E) X = F, Y = C

Diğer sayfaya geçiniz.
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16 - 17. sorularda, soru işaretinin yerine getirilmesi gereken şekli bulunuz.

In questions 16 - 17, find the figure that replaces the question mark.

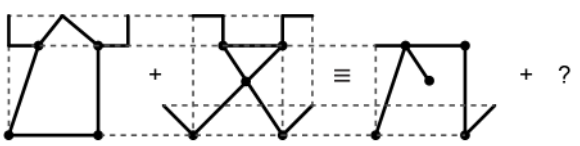
Wählen Sie bei den Aufgaben 16 - 17 die Figur aus, die das Fragezeichen ersetzen muss.

Dans les questions 16 - 17, trouvez la figure qui remplace le point d'interrogation.

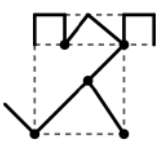
Какую фигуру нужно поставить вместо вопросительного знака в вопросах 16 - 17?

في السؤالين 16 - 17 أوجد الشكل الذي يجب أن يحل محل علامة الاستفهام (؟).

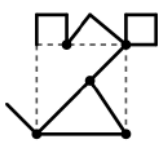
16.



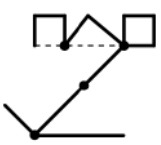
A)



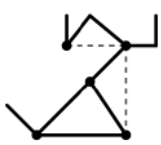
B)



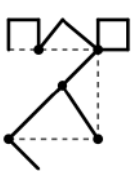
C)



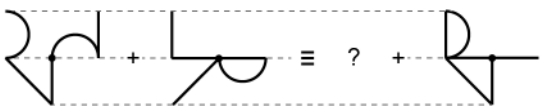
D)



E)



17.

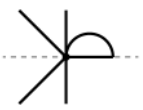


A)

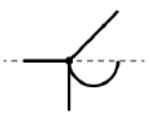
B)

C)

D)



E)



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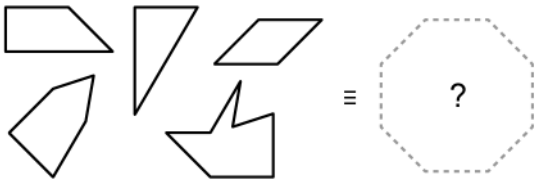
18.



Yukarıda verilen parçalar kullanılarak oluşturulan şekil aşağıdakilerden hangisidir?

Which of the following is the figure formed by using the given geometric shapes?

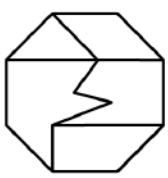
Welches Muster entsteht, wenn man die oben angegebenen Teile zusammensetzt?

Quelle est la forme géométrique obtenue en utilisant les fragments donnés ci-dessus?

Найдите фигуру, составленную из вышеприведённых частей.

أي شكل من الأشكال في الأسفل تم تكوينه باستخدام القطع المعطاة في الأعلى؟

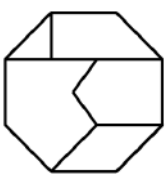
A)



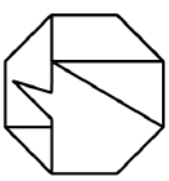
B)

C)

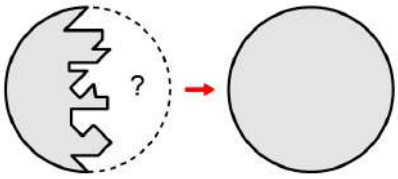
D)



E)



19.



Yukarıdaki şekilde soru işareti yerine getirilmesi gereken şekil aşağıdakilerden hangisidir?

Which of the following is indicated by the question mark in the figure given above?
Welche der folgenden Figuren ersetzt das Fragezeichen in der obigen Abbildung?
Quelle est la figure qui remplace le point d'interrogation ci-dessus?
Какую фигуру нужно поставить вместо вопросительного знака?

أي شكل من الأشكال في الأسفل يجب أن يحل محل علامة الاستفهام (؟) في الشكل الأعلى.

A)

B)

C)

D)

E)

Diğer sayfaya geçiniz.
Go on to the next page.

20 - 21. sorularda, verilen şekil matrisinde soru işaretinin yerine getirilmesi gereken şekli bulunuz.

In questions 20 - 21, find the figure which corresponds to the place indicated by the question mark in the given figure matrix.

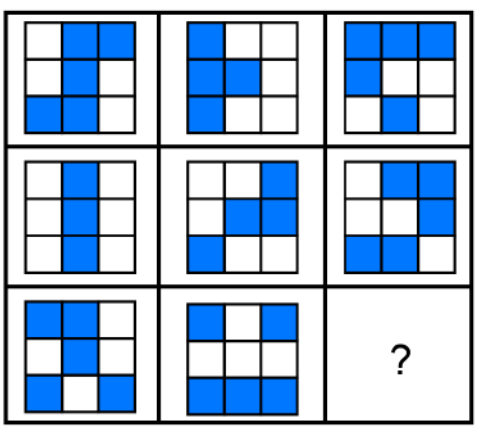
Wählen Sie bei den Aufgaben 20 - 21 die Figur aus, die an der Stelle des Fragezeichens stehen muss.

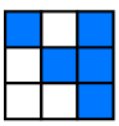
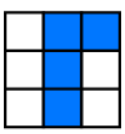
Dans les questions 20 - 21, trouvez la figure qui remplace le point d'interrogation dans la matrice de figures.

Какую из фигур нужно поставить вместо вопросительного знака в приведённой матрице фигур в вопросах 20 - 21?

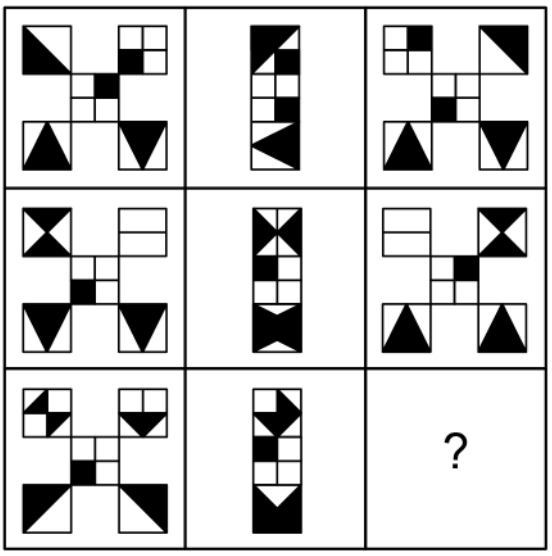
في السؤالين 20 - 21 أوجد الشكل الذي يجب أن يحل محل علامة الاستفهام

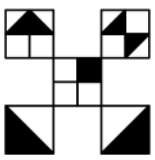
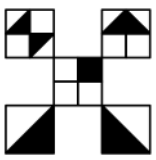
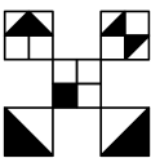
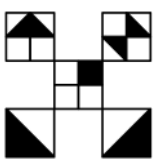
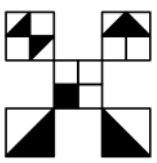
20.



A)
B) 
C)
D)
E) 

21.



A) 
B) 
C) 
D) 
E) 

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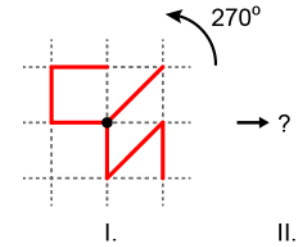
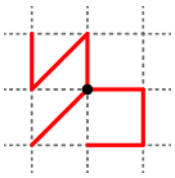
22.



A)


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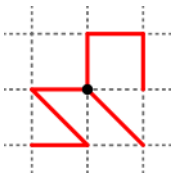
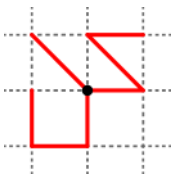
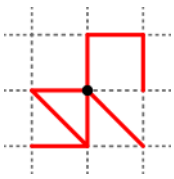
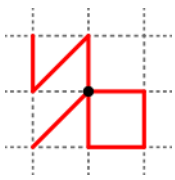


C)


D)


E)


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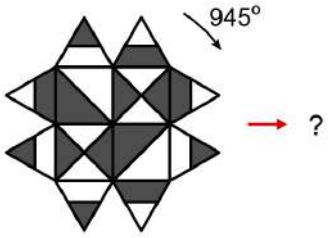
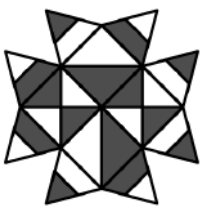


A)


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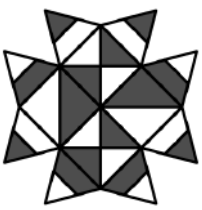
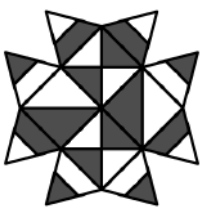
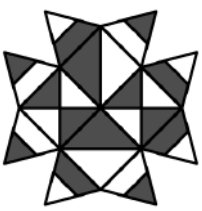
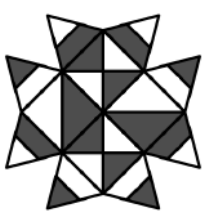


C)


D)


E)


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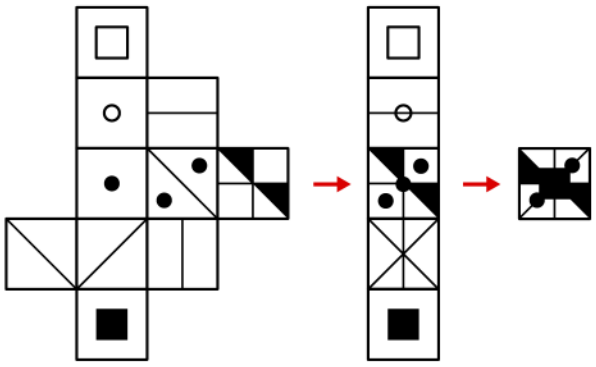
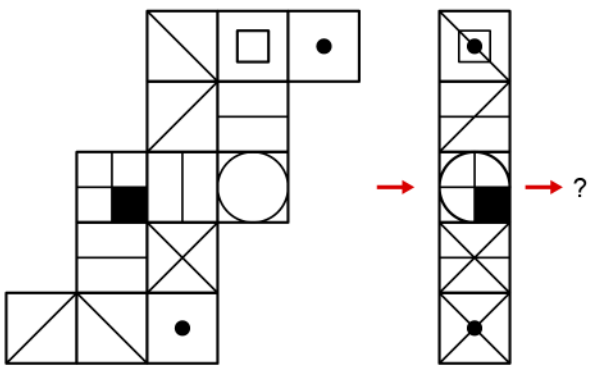
24.





A)

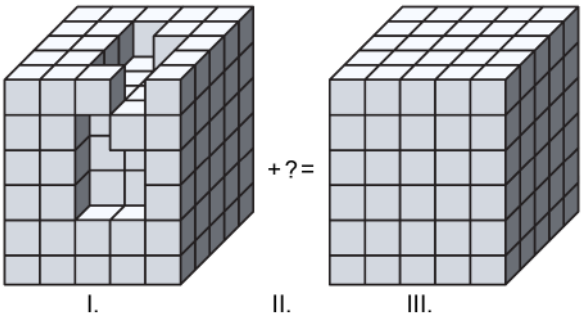
B)

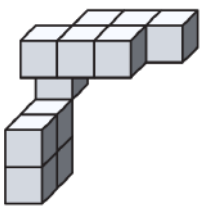
C)

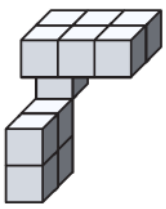
D)

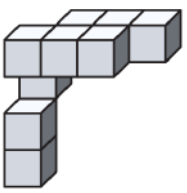
E)

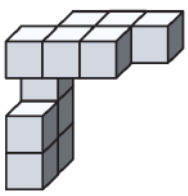
25.

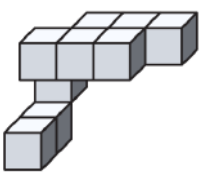


A) 

B) 

C) 

D) 

E) 

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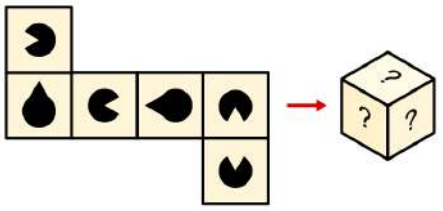
26.



A)

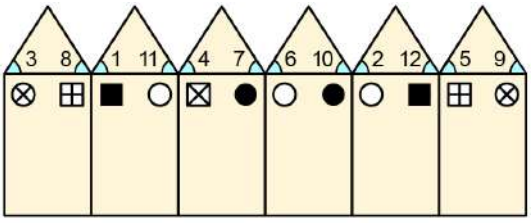
B)

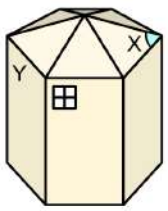
C)

D)

E)

27.

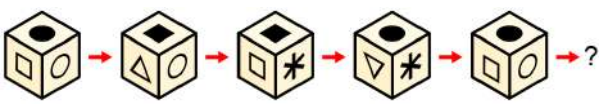


≡ 

$\Rightarrow$ **X** =? ; **Y** =?

	X	**Y**
A)	3	○
B)	3	■
C)	8	○
D)	8	⊗
E)	9	⊗

28.



A)

B)

C)

D)

E)

Diğer sayfaya geçiniz.
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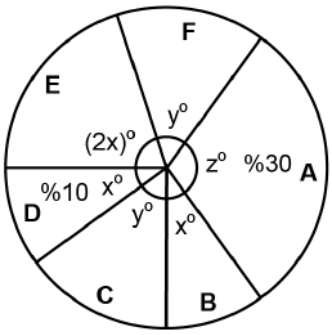
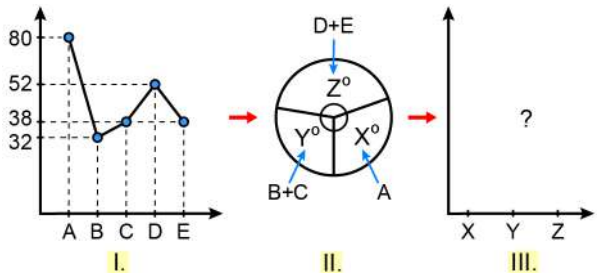
29.



$\Rightarrow x + y + z = ?$

A) 178 B) 182 C) 186 D) 194 E) 198

30.



Yukarıdaki I. grafikteki verilen bilgilere göre II. grafik oluşturulmuştur. II. grafikte verilen bilgilere göre oluşturulan III. grafik aşağıdakilerden hangisidir?

Graph II is formed based on the information given in graph I. Which of the following is graph III formed according to the information given in graph II?

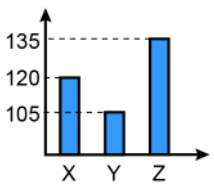
Aus den Angaben des oben dargestellten I. Diagramms wurde das II. Diagramm erstellt. Welches von den folgenden Diagrammen entspricht dem III. Diagramm, das wiederum aus den Angaben des II. Diagramms erstellt wurde?

À l'aide des données dans le graphique I ci-dessus, on constitue le graphique II. Quel est le graphique III constitué à l'aide des informations du graphique II?

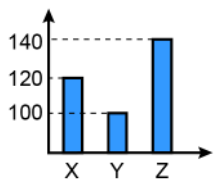
На основании данных вышеприведённого I-ого графика был составлен II-ой график. Какой из нижеприведённых графиков является III-им графиком, составленным на основании данных II-ого графика?

تم تكوين المخطط البياني II حسب المعلومات المعطاة في المخطط البياني I أعلاه. ما هو المخطط البياني III الذي تم تكوينه حسب المعلومات المعطاة في المخطط البياني II ؟

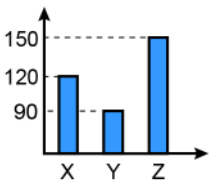
A)



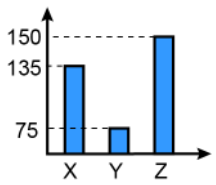
B)



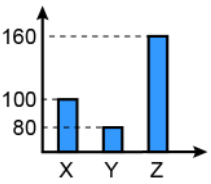
C)



D)



E)



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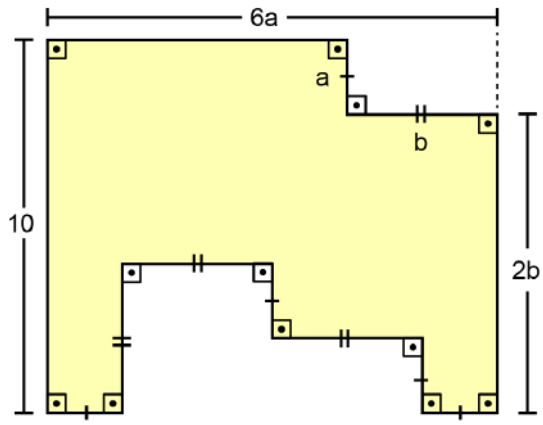
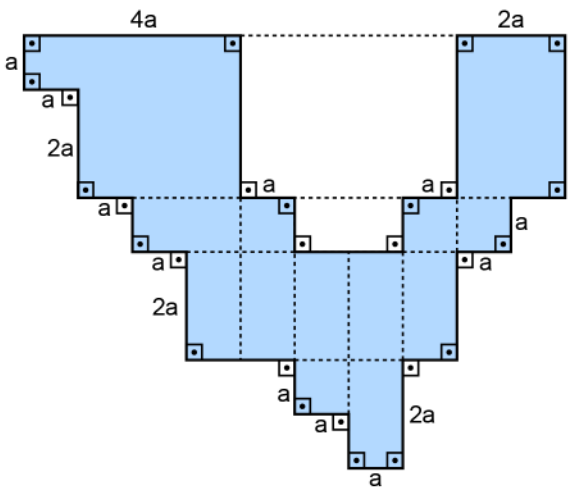
31.



Boyalı bölgenin çevresi kaçtır?
What is the perimeter of the shaded area?
Berechnen Sie den Umfang der gefärbten Fläche.
Quel est le périmètre de la partie colorée?
Найдите периметр закрашенной части фигуры.
كم محيط المنطقة الملونة؟

A) 44 B) 46 C) 48 D) 50 E) 52

32.



Boyalı bölgenin alanı kaçtır?
What is the area of the shaded part?
Berechnen Sie den Inhalt der gefärbten Fläche.
Quelle est l'aire de la partie colorée?
Найдите площадь закрашенной части.
كم مساحة المنطقة الملونة؟

A) $28a^2$ B) $31a^2$ C) $33a^2$ D) $34a^2$ E) $36a^2$

Diğer sayfaya geçiniz.
Go on to the next page.

33. Aşağıdaki her sayı birbirinden farklı bir harfe karşılık gelmektedir.

There is a different letter to represent each digit below.

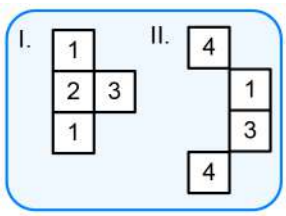
Jede Ziffer steht für einen Buchstabe. Gleiche Ziffern stehen für gleiche Buchstaben. Unterschiedliche Ziffern stehen für unterschiedliche Buchstaben.

Chaque nombre ci-dessous correspond à une lettre différente.

Все числа, данные ниже, обозначены другими разными буквами.

كل عدد يقابل حرفا مختلفا من الحروف التالية:

a	c	c	d	b	c	d
b	a	e	c	a	e	a
a	d	c	a	b	c	a
f	c	a	a	b	f	a
e	b	b	a	c	e	a
f	c	d	e	f	a	b
d	e	c	c	d	f	d



I ve II, yukarıdaki tablonun farklı birer parçasıdır.

I and II are different parts of the table above.

I und II sind die unterschiedlichen Teile der obigen Tabelle.

I et II représentent des combinaisons différentes tirées du tableau ci-dessus.

I и II являются разными частями таблицы, указанной выше.

I و II جزءان مختلفان من الجدول أعلاه.

$\Rightarrow 3 = ?, \quad 4 = ?$

	3	**4**
A)	a	c
B)	a	f
C)	b	d
D)	b	f
E)	f	d

34. Aşağıdaki her harf birbirinden farklı bir şekle karşılık gelmektedir.

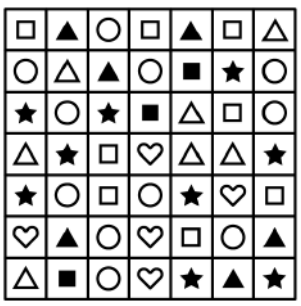
There is a different symbol to represent each letter below.

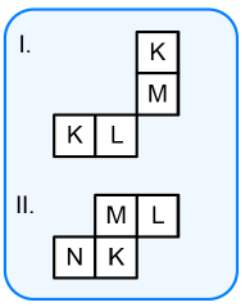
Jeder Buchstabe steht für eine Figur. Gleiche Buchstaben stehen für gleiche Figuren. Unterschiedliche Buchstaben stehen für unterschiedliche Figuren.

Chaque lettre ci-dessous correspond à une figure différente.

Все буквы, данные ниже, обозначены разными фигурами.

كل حرف يقابل شكلا مختلفا من الأشكال التالية:





I ve II, yukarıdaki tablonun farklı birer parçasıdır.

I and II are different parts of the table above.

I und II sind die unterschiedlichen Teile der obigen Tabelle.

I et II représentent des combinaisons différentes tirées du tableau ci-dessus.

I и II являются разными частями таблицы, указанной выше.

I و II جزءان مختلفان من الجدول أعلاه.

$\Rightarrow \mathbf{M} = ?, \quad \mathbf{N} = ?$

	M	**N**
A)	□	♡
B)	○	♡
C)	□	★
D)	★	▲
E)	■	□

Diğer sayfaya geçiniz.
Go on to the next page.

35 - 36. sorularda, verilen şekil dizisinde soru işaretinin yerine getirilmesi gereken şekli bulunuz.

In questions 35 - 36, find the figure that replaces the question mark in the given figure sequence.

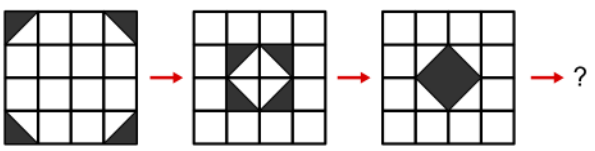
Wählen Sie bei den Aufgaben 35 - 36 die Figur aus, die an der Stelle des Fragezeichens stehen muss.

Dans les questions 35 - 36, trouvez la figure qui remplace le point d'interrogation dans la série de figures.

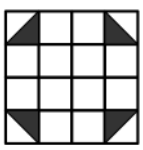
Какую фигуру нужно поставить вместо вопросительного знака в приведённом ряду фигур в вопросах 35 - 36?

في السؤالين 35-36. أوجد الشكل الذي يجب أن يحل محل علامة الاستفهام (؟) في سلسلة الأشكال المبينة

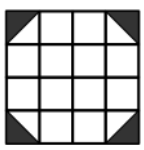
35.



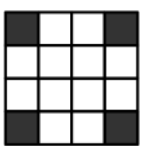
A)



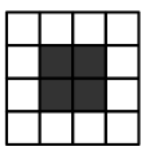
B)



C)

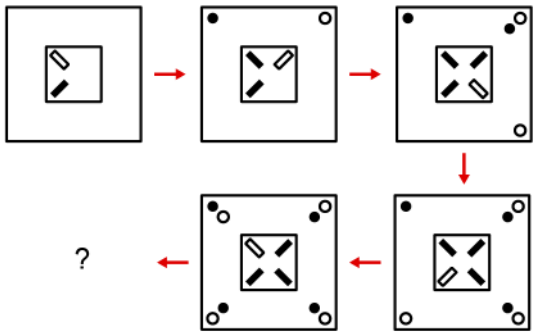


D)

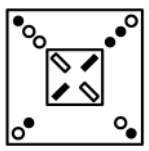


E)

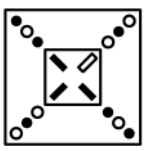
36.



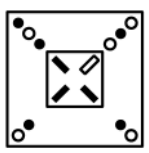
A)



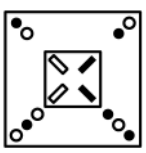
B)



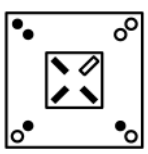
C)



D)



E)



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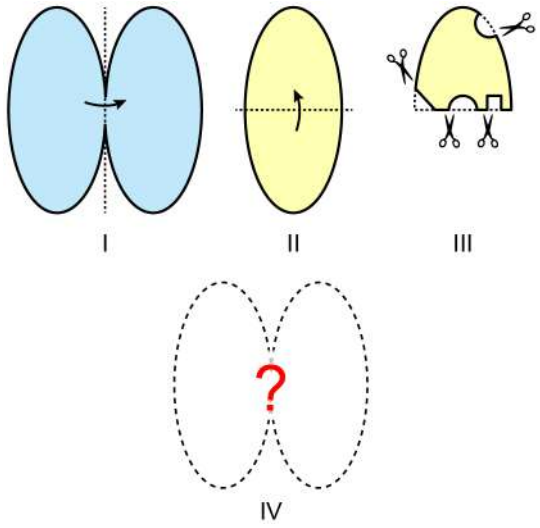
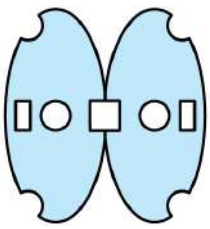
Go on to the next page.

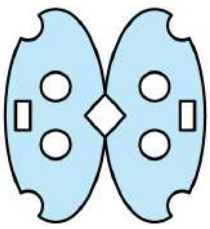
37.



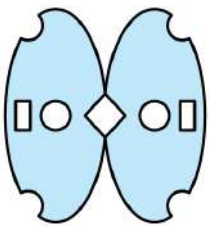
A)



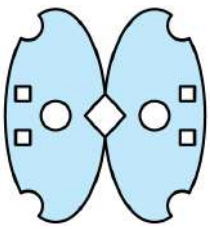
B)



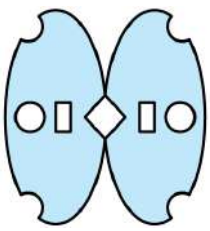
C)



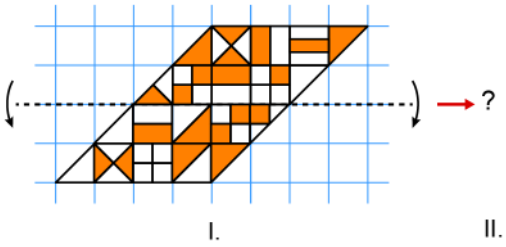
D)



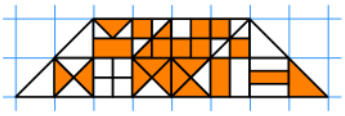
E)



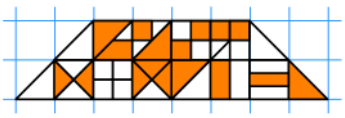
38.



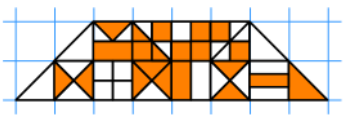
A)



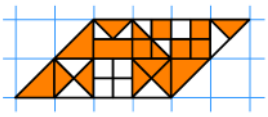
B)



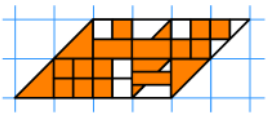
C)



D)



E)



Diğer sayfaya geçiniz.
Go on to the next page.

39 - 40. sorularda diğerlerinden farklı olan şekli bulunuz.

In questions 39 - 40, find the figure that is different from the others.

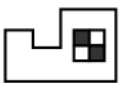
Wählen Sie bei den Aufgaben 39 - 40 die Figur aus, die sich von den anderen unterscheidet.

Dans les questions 39 - 40, trouvez la figure différente des autres.

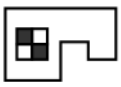
В вопросах 39 - 40 найдите фигуру, отличающуюся от остальных.

في السؤالين 39-40 أوجد الشكل المختلف عن الأشكال الأخرى

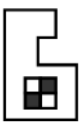
39.

A) 

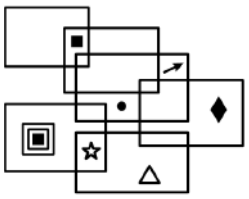
B)

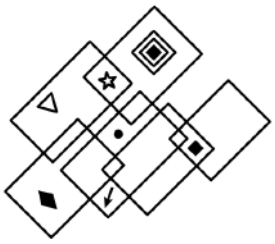
C) 

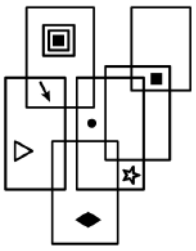
D)

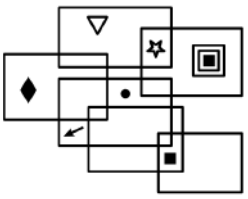
E) 

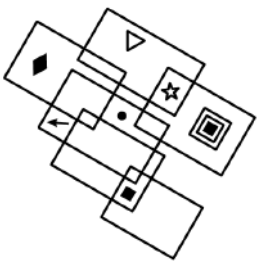
40.

A) 

B) 

C) 

D) 

E) 

TEMEL MATEMATİK TESTİNE GEÇİNİZ.
GO ON TO BASIC MATHEMATICAL TEST.

Bu testte 40 soru vardır.

This test consists of 40 questions.

1. $\frac{3}{5} : \left(\frac{1}{3} - \frac{3}{10}\right) - 6 \cdot \left(\frac{8}{3} - \frac{1}{6}\right) = ?$

A) $\frac{1}{3}$ B) $\frac{4}{3}$ C) $\frac{11}{3}$

D) 2 E) 3

2. $\dfrac{\frac{1}{7} - \left(\frac{1}{6} + \frac{1}{3}\right)}{\frac{9}{14} - \frac{2}{7}} = ?$

A) -7 B) -1 C) 5

D) $-\frac{1}{7}$ E) $\frac{1}{7}$

3. $\dfrac{6^4 - 2^4 - 3^4 + 1}{2^3} = ?$

A) 120 B) 130 C) 140 D) 150 E) 160

4. $\dfrac{4 \cdot 15^3 + 5 \cdot 6^3}{10 \cdot 9^3} = ?$

A) 1 B) 2 C) 4 D) 5 E) 10

5.

$$\frac{\sqrt{1000}\cdot\sqrt{50}-\sqrt{500}}{\left(2\sqrt{5}\right)\cdot\left(3\sqrt{5}\right)\cdot\left(4\sqrt{5}\right)}=?$$

A) $\frac{1}{\sqrt{5}}$ B) $\frac{1}{4}$ C) $\frac{3}{4}$

D) $\sqrt{5}$ E) $2\sqrt{5}$

6.

$$\sqrt{\frac{\sqrt{2}\cdot\sqrt{3}\cdot\sqrt{5}\cdot\sqrt{7}}{\sqrt{8}\cdot\sqrt{10}\cdot\sqrt{14}\cdot\sqrt{27}}}=?$$

A) $\frac{1}{6}$ B) $\frac{1}{2}$ C) $\frac{1}{3\sqrt{3}}$

D) $\frac{1}{\sqrt{6}}$ E) $\frac{1}{2\sqrt{3}}$

7.

$$\frac{4!\cdot 5!-6!}{3!\cdot 4!-5!}=?$$

A) 90 B) 120 C) 150 D) 160 E) 180

8.

$$\begin{array}{r} AA \\ \times\ BB \\ \hline AA \\ +\ \bullet\bullet \\ \hline 84A \end{array} \qquad \begin{array}{r|l} BAA & 59 \\ \hline - & C \\ \hline 0 & \end{array}$$

$\Rightarrow \mathbf{A}+\mathbf{B}+\mathbf{C}=?$

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

Diğer sayfaya geçiniz.
Go on to the next page.

9. $-1 < x < 0$

$\Rightarrow ? < ? < ?$

A) $x^4 < x^5 < x^6$ B) $x^4 < x^6 < x^5$

C) $x^5 < x^4 < x^6$ D) $x^5 < x^6 < x^4$

E) $x^6 < x^5 < x^4$

10. $\dfrac{a^2 - ab - 2b^2}{a^2 - 3ab + 2b^2} \cdot (a-b)^2 = ?$

A) $a^2 + b^2$ B) $a^2 - b^2$ C) $a^2 - 4b^2$

D) $(a+b)^2$ E) $(a-2b)^2$

11. $\dfrac{2x-1}{3-x} = \dfrac{x-3}{2} - \dfrac{3x-1}{6}$

$\Rightarrow \mathbf{x} = ?$

A) $-\dfrac{15}{2}$ B) $-\dfrac{9}{2}$ C) $-\dfrac{5}{2}$

D) $\dfrac{5}{2}$ E) $\dfrac{9}{2}$

12. $x \cdot y = -6$

$x(x - 2y - 4) = 8$

$\Rightarrow \mathbf{x + y} = ?$

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

13. $x + 2y = 2x - y = 10$

$\Rightarrow \mathbf{x - y} = ?$

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

Diğer sayfaya geçiniz.
Go on to the next page.

14.

$$\frac{2x}{y} = \frac{3}{5}$$

$$\frac{x}{z} = \frac{1}{4}$$

$$\Rightarrow \frac{2x+y+2z}{x} = ?$$

A) $\frac{25}{2}$ B) $\frac{40}{3}$ C) $\frac{46}{3}$ D) $\frac{32}{5}$ E) $\frac{42}{5}$

15.

$$\frac{2 \cdot 27^x}{3^{x-1} \cdot 2^x} = \frac{243}{2^{x-1} \cdot 3^x}$$

$$\Rightarrow x = ?$$

A) $\frac{3}{2}$ B) $\frac{4}{3}$ C) $\frac{5}{4}$ D) $\frac{6}{5}$ E) $\frac{7}{6}$

16.

$$3^{m-1} = \sqrt{2}$$

$$\Rightarrow \left(\frac{1}{9}\right)^{1-m} = ?$$

A) 27 B) 9 C) 2 D) $\frac{1}{3}$ E) $\frac{1}{2}$

17.

$$6x + \sqrt{3x+y} = 23$$

$$2y - \sqrt{3x+y} = 27$$

$$\Rightarrow x \cdot y = ?$$

A) 20 B) 28 C) 36 D) 42 E) 48

18. a, b ve c birer pozitif tam sayıdır.
a, b and c are positive integers.
a, b und c sind positive ganze Zahlen.
a, b et c sont des nombres entiers positifs.
a, b и c обозначают положительные целые числа.
كل من a، b و c عدد صحيح موجب.

$$20 < a + 3 < b - 2 < 24$$

$$c = \frac{a + b + 1}{5}$$

$\Rightarrow \mathbf{a - b + c} = ?$

A) 3 B) 4 C) 5 D) 6 E) 7

19.

$$|a + 15| = b$$

$$|7 - b| = 9$$

$$|c - 3| = -a$$

$$c > 0$$

$\Rightarrow \mathbf{a + b + c} = ?$

A) 17 B) 18 C) 19 D) 20 E) 21

20.

$$|x - 6| = |2 + x|$$

$$x \cdot |y + 1| = |2y - 9|$$

$\Rightarrow \mathbf{x \cdot y} = ?$

A) $\frac{5}{2}$ B) $\frac{7}{2}$ C) $\frac{9}{2}$

D) 3 E) 4

21.

$$A \cup C = \{1, 2, 3, 4, 5, 6\}$$

$$B \subseteq A$$

$$A \setminus B = \{1, 2, 3\}$$

$$A \setminus C = \{2, 3, 4\}$$

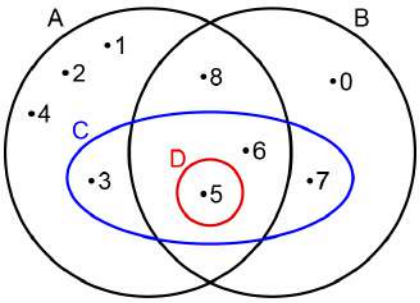
$$C \setminus A = \{6\}$$

$\Rightarrow \mathbf{B} = ?$

A) $\{3, 4, 5\}$ B) $\{3, 4\}$ C) $\{4, 5\}$

D) $\{3, 5\}$ E) $\{5\}$

22.



$\Rightarrow (A \setminus C) \cap (B \setminus D) = ?$

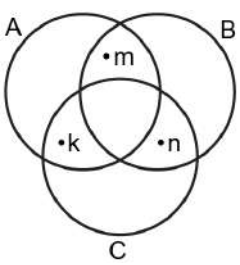
A) $\{6\}$ B) $\{7\}$ C) $\{8\}$ D) $\{0,2\}$ E) $\{3,7\}$

23.

$A = \{1,2,3,4,5\}$

$B = \{2,3,6,7,8\}$

$C = \{3,5,6\}$



$\Rightarrow \mathbf{k+m+n=?}$

A) 13 B) 14 C) 15 D) 16 E) 17

24.

$2 \cdot f(x) + f(2-x) + x^3 = 7$

$\Rightarrow \mathbf{f(0) + f(2) = ?}$

A) 6 B) 5 C) 4 D) 3 E) 2

25.

$f\left(2^x\right) = \dfrac{3^x + 1}{2}$

$\mathbf{f(a) = 14 \Rightarrow f\left(\dfrac{a}{16}\right) = ?}$

A) $\frac{1}{2}$ B) $\frac{2}{3}$ C) $\frac{4}{3}$

D) 1 E) 2

26.

$f(x-2) = g(x+2)$

$(f \circ g)(4) = (g \circ f)(6)$

$f(0) = 2$

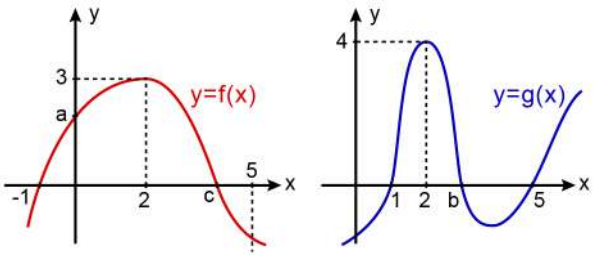
$g(10) = 10$

$\Rightarrow \mathbf{f(2) = ?}$

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

Diğer sayfaya geçiniz.
Go on to the next page.

27. a, b ve c birer gerçel (reel) sayıdır.
a, b and c are real numbers.
a, b und c sind reelle Zahlen.
a, b et c sont des nombres réels.
a, b и c обозначают действительные числа.
كل من a، b و c عدد حقيقي (reel).



$(g \circ f)(2) = (f \circ g)(2) = 0$

$(f \circ g)(1) = 2$

$\Rightarrow \mathbf{a+b+c} = ?$

A) 6 B) 7 C) 8 D) 9 E) 10

28. a ve b birer gerçel (reel) sayıdır.
a and b are real numbers.
a und b sind reelle Zahlen.
a et b sont des nombres réels.
a и b обозначают действительные числа.
كل من a و b عدد حقيقي (reel).

$P(x) = 2x^3 + ax + b$

$P(0) = P(2)$

$P(3) = 47$

$\Rightarrow \mathbf{a+b} = ?$

A) 4 B) 6 C) 8 D) 9 E) 11

29. a bir pozitif gerçel (reel) sayıdır.
a is a positive real number.
a ist eine positive reelle Zahl.
a est un nombre réel positif.
a обозначает положительное действительное число.
a عدد صحيح موجب (reel).

$P(x) = (x-1)^3 \cdot Q(x+a)$

$Q(x) = (x+1)^2 \cdot H(x-a)$

$4 \cdot P(0) + 9 \cdot H(0) = 0$

$H(0) \neq 0$

$\Rightarrow \mathbf{a} = ?$

A) $\frac{1}{2}$ B) $\frac{3}{2}$ C) $\frac{2}{3}$ D) 1 E) 2

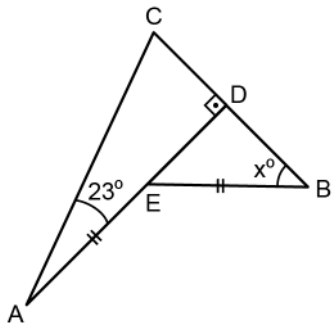
30. $x^3 + x^2 + 1 = (x^2-1) \cdot (x+1) + ax + b$

$\Rightarrow \mathbf{a^2 + b^2} = ?$

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

Diğer sayfaya geçiniz.
Go on to the next page.

31.



$|CD| = |DB|$

$|AE| = |EB|$

$[AD] \perp [CB]$

$m(\widehat{CAD}) = 23^\circ$

$m(\widehat{EBD}) = x^\circ$

ADC ve EBD birer üçgendir.

ADC and EBD are triangles.

Gegeben sind Dreiecke ADC und EBD.

ADC et EBD sont des triangles.

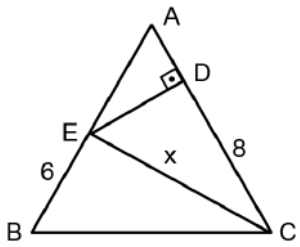
ADC и EBD – треугольники.

ADC و EBD كل واحد منهما مثلث.

$\Rightarrow x = ?$

A) 54 B) 52 C) 50 D) 46 E) 44

32.



$E \in [AB],\ D \in [AC]$

$[ED] \perp [AC]$

$|DC| = 8$

$|EB| = 6$

$|EC| = x$

ABC bir eşkenar üçgendir.

ABC is an equilateral triangle.

ABC ist ein gleichseitiges Dreieck.

ABC est un triangle équilatéral.

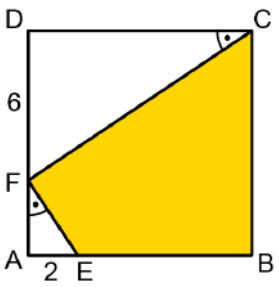
ABC – равносторонний треугольник.

ABC معين (ثلاثي متساوي الأضلاع).

$\Rightarrow x = ?$

A) $2\sqrt{19}$ B) $2\sqrt{21}$ C) $3\sqrt{11}$ D) 9 E) 10

33.



$E \in [AB]$, $F \in [AD]$

$m(\widehat{DCF}) = m(\widehat{AFE})$

$|AE| = 2$

$|DF| = 6$

ABCD bir karedir.

ABCD is a square.

Gegeben ist ein Quadrat ABCD.

ABCD est un carré.

ABCD – квадрат.

ABCD مربع.

Boyalı bölgenin alanı kaçtır?

What is the area of the shaded part?

Berechnen Sie den Inhalt der farbig markierten Fläche.

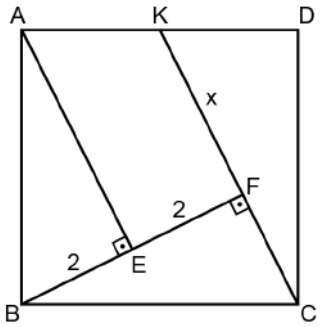
Quelle est l'aire de la partie colorée?

Найдите площадь закрашенной части фигуры.

ما مساحة المنطقة الملونة؟

A) 41 B) 46 C) 51 D) 56 E) 61

34.



$K \in [AD]$

$[AE] \perp [BF]$

$[BF] \perp [KC]$

$|BE| = |EF| = 2$

$|KF| = x$

ABCD bir karedir.

ABCD is a square.

Gegeben ist ein Quadrat ABCD.

ABCD est un carré.

ABCD – квадрат.

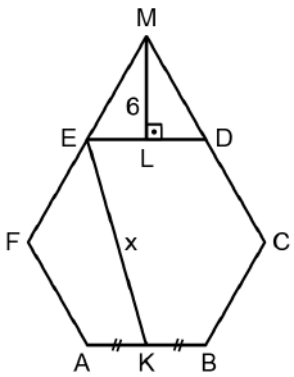
ABCD مربع.

$\Rightarrow \mathbf{x} = ?$

A) 2 B) 3 C) 4 D) 5 E) 6

Diğer sayfaya geçiniz.
Go on to the next page.

35.



$E \in [FM]$, $D \in [MC]$
$L \in [ED]$, $K \in [AB]$
$[ML] \perp [ED]$
$|AK| = |KB|$
$|ML| = 6$
$|EK| = x$

ABCDEF bir düzgün altıgendir.

ABCDEF is a regular hexagon.

Gegeben ist ein regelmäßiges Sechseck ABCDEF.

ABCDEF est un hexagone régulier.

ABCDEF – правильный шестиугольник.

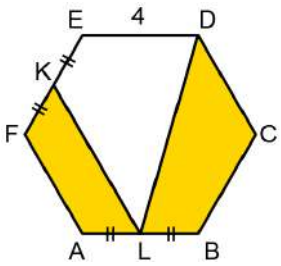
ABCDEF سداسي منتظم.

$\Rightarrow$ **x =?**

A) $2\sqrt{35}$ B) $2\sqrt{37}$ C) $2\sqrt{39}$

D) $2\sqrt{41}$ E) $2\sqrt{43}$

36.



$K \in [EF]$, $L \in [AB]$
$|AL| = |LB| = |FK| = |KE|$
$|ED| = 4$

ABCDEF bir düzgün altıgendir.
ABCDEF is a regular hexagon.
ABCDEF ist ein regelmäßiges Sechseck.
ABCDEF est un hexagone régulier.
ABCDEF – правильный шестиугольник.
ABCDEF سداسي منتظم.

Boyalı bölgenin alanı kaçtır?

What is the area of the shaded part?

Berechnen Sie den Inhalt der farbig markierten Fläche.

Quelle est l'aire de la partie colorée?

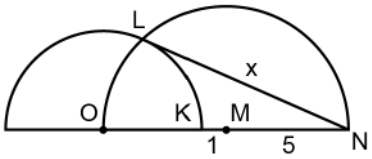
Найдите площадь закрашенной части фигуры.

ما مساحة المنطقة الملونة؟

A) $13\sqrt{3}$ B) $14\sqrt{3}$ C) $15\sqrt{3}$

D) $16\sqrt{3}$ E) $17\sqrt{3}$

37.



$|KM| = 1$
$|MN| = 5$
$|LN| = x$

L noktası, O ve M merkezli yarım çemberlerin üzerindedir.
Point L is on the semi-circles with centres O and M.
Punkt L liegt auf den Halbkreisen mit den Mittelpunkten O und M.
Point L est sur les demi-cercles de centre O et M.
Точка L находится на полуокружностях с центрами O и M.
نقطة L تقع على نصف الدائرتين اللتين مركزهما O و M.

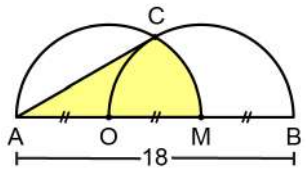
O, K, M ve N doğrusaldır.
O, K, M and N are collinear.
O, K, M und N sind linear.
O, K, M et N sont linéaires.
O, K, M и N – прямолинейные.
O و K و M و N خط مستقيم.

$\Rightarrow$ **x** =?

A) $4\sqrt{3}$ B) $2\sqrt{15}$ C) $5\sqrt{3}$

D) $2\sqrt{21}$ E) $3\sqrt{10}$

38.



$|AB| = 18$

$|AO| = |OM| = |MB|$

O ve M merkezli iki yarım çember
Two semi-circles with centres O and M
Gegeben sind zwei Halbkreise mit den Mittelpunkten O und M.
Deux demi-cercles de centre O et M
Две полуокружности с центрами в точках O и M.
نصف دائرتين مركزهما O و M.

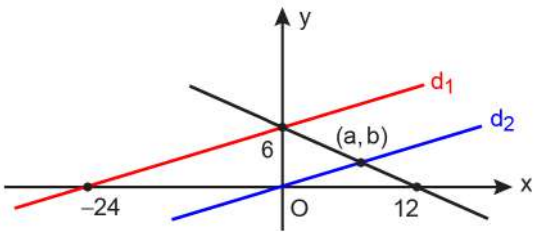
Boyalı bölgenin alanı kaçtır?
What is the area of the shaded part?
Berechnen Sie den Inhalt der farbig markierten Fläche.
Quelle est l'aire de la partie colorée?
Найдите площадь закрашенной части фигуры.
ما مساحة المنطقة الملونة؟

A) $6\pi + 9\sqrt{3}$ B) $12\pi + 9\sqrt{3}$ C) $18\pi - 9\sqrt{3}$

D) 6π E) 12π

39. d_1 ve d_2 doğruları paraleldir.
The lines d_1 and d_2 are parallel.
Die Geraden d_1 und d_2 sind zueinander parallel.
Les droites d_1 et d_2 sont parallèles.
Прямые d_1 и d_2 параллельны друг другу.

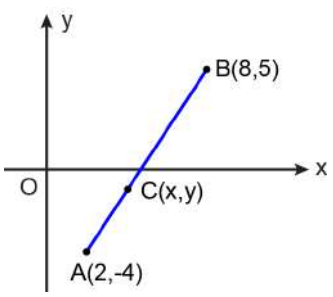
d_1 و d_2 مستقیمان متوازیان.



$\Rightarrow \mathbf{a-b}=?$

A) 3 B) 4 C) 6 D) 8 E) 9

40.



$|AB| = 3|AC|$

$\Rightarrow \mathbf{x \cdot y}=?$

A) -7 B) -6 C) -5 D) -4 E) -3

TEST BİTTİ. CEVAPLARINIZI KONTROL EDİNİZ.
END OF THE TEST. CHECK YOUR ANSWERS.

2023 TÜRKİYE YURT DIŞINDAN ÖĞRENCİ KABUL SINAVI/2

2023 TR-YÖS/2

12-11-2023

SAYISAL YETENEK TESTİ NUMERICAL ABILITY TEST	TEMEL MATEMATİK TESTİ BASIC MATHEMATICAL TEST
1. A	1. E
2. D	2. B
3. E	3. D
4. D	4. B
5. E	5. C
6. D	6. E
7. B	7. A
8. B	8. B
9. E	9. D
10. B	10. B
11. E	11. B
12. C	12. C
13. C	13. D
14. B	14. B
15. C	15. B
16. B	16. C
17. C	17. E
18. B	18. A
19. A	19. C
20. E	20. B
21. A	21. C
22. B	22. C
23. A	23. A
24. C	24. E
25. D	25. B
26. A	26. E
27. C	27. D
28. C	28. D
29. E	29. A
30. A	30. E
31. E	31. E
32. D	32. A
33. D	33. C
34. A	34. B
35. A	35. C
36. C	36. A
37. C	37. D
38. A	38. A
39. D	39. C
40. C	40. D