

**ULUSLARARASI ÖĞRENCİ SINAVI
TEMEL ÖĞRENME BECERİLERİ TESTİ | INTERNATIONAL STUDENT EXAM
BASIC LEARNING SKILLS TEST**

05.06.2022

A

**GENEL AÇIKLAMA
GENERAL INSTRUCTIONS**

Bu sınavdaki soruların nasıl cevaplanacağı, testlerin başında açıklanmıştır. Soruları cevaplamaya başlamadan önce bu açıklamaları dikkatle okuyunuz.

How to answer the questions in this exam is explained at the beginning of each question. Read these explanations carefully before answering the questions.

Bu testlerdeki her sorunun bir tek doğru cevabı vardır. Bir soru için birden çok cevap işaretlenmişse, o soru yanlış cevaplanmış sayılacaktır.

Each question in these tests has only one correct answer. If more than one answer place is marked for a question, that question will be deemed to have been answered incorrectly.

Cevaplarınızı koyu siyah ve yumuşak bir kurşun kalemlle işaretleyiniz. İşaretlerinizi cevap yerinin dışına taşırmaınız, tükenmez kalem veya dolma kalem kullanmayın.

Mark your answers with a dark-black soft pencil. Fill in the circle completely for the answer you have chosen, but make sure your mark does not go beyond the borders of the circle. Do not use any sort of ballpoint or fountain pens.

Cevap kağıdınızı borusutmayınız, katlamayınız ve üzerine gereksiz hiçbir işaret koymayınız.

Keep the answer sheet flat and do not fold or crease it. Do not place any unnecessary marks on it.

Değiştirmek istediğiniz bir cevabı, yumuşak bir silgiyle, cevap kağıdını öselemeden, temizce siliniz ve yeni cevabınızı işaretlemeyi unutmayın.

Completely erase and clean the answer you want to change with a soft eraser. Do not forget to mark your new answer.

Adayların sınav puanı, doğru cevaplar dikkate alınarak yüz (100)'luk sistem üzerinden hesaplanacaktır. Yanlış cevaplar sınav sonucuna herhangi bir etki yapmayacağından emin olun.

Exam scores of the candidates will be calculated according to the hundred (100) evaluation system by taking the correct answers only into consideration. Wrong answers will not have any effect on the test result.

Sınavda uygulanacak diğer kurallar bu kitabığın arka kapısında belirtilmiştir.

Other rules and regulations to be followed in the exam are indicated on the back cover of this booklet.

ADI NAME	_____
SOYADI SURNAME	_____
ADAY NO APPLICANT NUMBER	_____
SINAV SALON NO EXAM ROOM NUMBER	_____

IMZA
SIGN

Adınızı, soyadınızı, aday numarası ve sınav salon numaranızı yukarıda yazınız.
Write your name, surname, applicant number and exam room numbers in the appropriate places above.

Bu testin her hakkı saklıdır. Hangi amaçla olursa olsun, testin tamamının veya bir kısmının Merkezimizin yazılı izni olmadan kopya edilmesi, fotoğrafının çekilmesi, herhangi bir yolla çoğaltılması, yayımlanması ya da kullanılması yasaktır. Bu yasağı uymayanlar gerekli cezai sorumluluğu ve testlerin hazırlanmasındaki mali külfeti paginanın kabullenmiş sayılırlar.

1) $\frac{1}{1-2^{-10}} + \frac{1}{1-2^{-9}} + \dots + \frac{1}{1-2^{-1}} + \frac{1}{1+2^0} + \frac{1}{1-2^1} + \dots + \frac{1}{1-2^9} + \frac{1}{1-2^{10}} = ?$

- A) $-\frac{21}{2}$ B) -11 C) $\frac{21}{2}$ D) 11 E) 10

3) $x^2 - bx + 8 = 0$ denkleminin kökleri x_1 ve x_2 dir.
Roots of the equation $x^2 - bx + 8 = 0$ are x_1 and x_2 .

$$\frac{1}{\sqrt[3]{x_1}} + \sqrt[3]{x_2} = 3 \Rightarrow x_1 + x_2 = ?$$

- A) 9 B) -8 C) 6 D) 8 E) -9

2) $\sqrt{7+\sqrt{48}}$ ile $\sqrt{7-\sqrt{48}}$ sayılarının aritmetik ortalaması kaçtır?

What is the arithmetic mean of the numbers $\sqrt{7+\sqrt{48}}$ and $\sqrt{7-\sqrt{48}}$?

- A) 4 B) 7 C) 3 D) 2 E) 5

4) $|1-x| + |2-x| + |3-x| + \dots + |21-x|$

toplamanın alacağı en küçük değer kaçtır?

What is the smallest value of the sum?

- A) 105 B) 210 C) 255 D) 231 E) 110

5) $y = f(x) = \frac{x+4}{x-3} \Rightarrow x = ?$

- A) $\frac{1}{3f(y)}$ B) $f(y)$ C) $3f(3y)$
 D) $3f(y)$ E) $\frac{3}{f(3y)}$

7) -3 sayısı aşağıdaki kümelerden hangisinin elemanıdır?

- Which of the following sets has -3 as an element?
 A) $\{-1, \{-1\}, \{-3\}, \{-1, -3\}\}$ B) $\{x \in \mathbb{N} : -x \in \mathbb{N}\}$
 C) $\{x \in \mathbb{Z} : x^3 = 3^x\}$ D) $\{x \in \mathbb{Z} : |x| = -x\}$
 E) $\{\{-1, -3\}, \{-2, -3\}, \{-1, -2, -3\}\}$

6)

abc	
abc	
$+ abc$	
\underline{ccc}	

$a \neq b, a \neq c, b \neq c \Rightarrow a+b+c=?$

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

8) $3^{4x-8} = 23^4 + 16 \cdot 23^3 + 96 \cdot 23^2 + 256 \cdot 23 + 4^4 \Rightarrow x=?$

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

- 9) 'AEROSPACE' kelimesindeki harflerin, iki E harfinin yan yana gelmesi koşuluyla, permütasyonları sayısını hesaplayınız.

Calculate the number of permutations of the letters of the word 'AEROSPACE' provided that two E letters are next to each other.

A) $\frac{7!}{2!}$ B) $\frac{8!}{2!}$ C) $\frac{8!}{2!2!}$ D) $\frac{9!}{2!}$ E) $\frac{9!}{2!2!}$

- 10) a, b ve c tamsayılar olmak üzere, $a < b < 0 < c$ ise, aşağıdakilerden hangisinin değeri daima sıfırdan büyükterdir?

Given that a, b and c are integers satisfying $a < b < 0 < c$, which of the followings are always positive?

A) $\frac{a+b}{c-b}$ B) $\frac{c+b}{c-a}$ C) $\frac{a-b}{c-b}$ D) $\frac{c+a}{c-a}$ E) $\frac{b-a}{c-b}$

11) $x\sqrt{x} - 6\sqrt{x} = 5 \Rightarrow x - \sqrt{x} = ?$

A) 5 B) 6 C) 8 D) 9 E) 11

- 12) Hilesiz iki zar birlikte art arda 3 kere atılıyor. Üste gelen sayıların toplamının atışlardan sadece ikisinde 7 gelme olasılığı kaçtır?

Two fair dice are rolled together 3 times in a row. What is the probability that the sum of the numbers on top is 7 for two throws out of three?

A) $\frac{5}{216}$ B) $\frac{1}{36}$ C) $\frac{1}{72}$ D) $\frac{5}{6}$ E) $\frac{5}{72}$

13) $\frac{\sqrt{1,44} + \sqrt{0,25 - \sqrt{0,0256}}}{4,3} = ?$

- A) 1 B) 2 C) 3 D) 5 E) 10

14) $\frac{(a-b)^2(c-a)-(a-c)^2(b-a)}{a^2-ab-ac+bc} = ?$

- A) $a-b$ B) $b-c$ C) $c-a$ D) $b-a$ E) $c-b$

15) $9^{x+1} - 12 \cdot 3^x + 3 = 0$

Yukarıdaki denklemin kökleri toplamı nedir?
What is the sum of the roots of the above equation?

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

16) $1 + \frac{1}{x^2} + \frac{1}{x^4} < \frac{2}{x} + \frac{2}{x^3} + \frac{2}{x^5}$

Yukarıdaki eşitsizliğin çözüm kümesi aşağıdakilerden hangisidir?

- A) $(0,2)$ B) $(-2,0)$ C) $(-2,2)$ D) $(0,3)$ E) $\mathbb{R} - \{0\}$

17) $\frac{5}{\log_2 54} + \frac{3}{\log_3 54} - \frac{2}{\log_4 54} = ?$

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

19) $\frac{a}{5} - \frac{4}{b} - \frac{c}{2}, \quad a+b-2c=4 \Rightarrow a-c=?$

- A) 5 B) 2 C) 4 D) 7 E) 6

18) $P(x)$ bir polinom / $P(x)$ is a polynomial
 $(x+1)^2 P(x) = mx^4 + nx^2 + (1-2m)x + 3n$

$P(0) = 3 \Rightarrow m+n=?$

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

20) $\frac{A|B}{4} \quad \frac{B|C}{5} \Rightarrow \frac{A+B+C-24}{3C}=?$

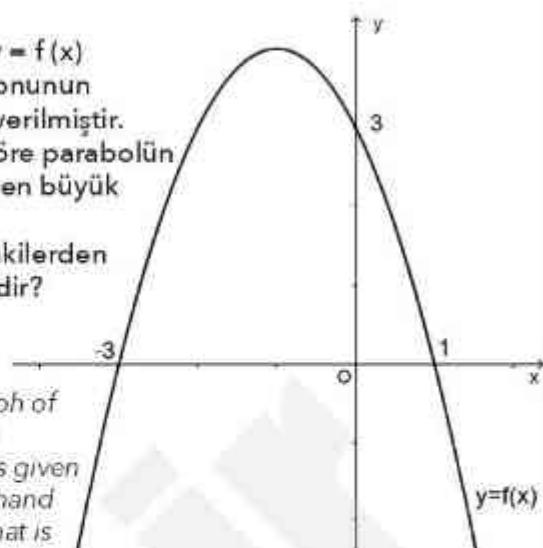
- A) 1 B) 2 C) 3 D) 4 E) 5

21) $\left| \frac{2}{a^2 - 1} \right| > \frac{1}{2}$ eşitsizliğini sağlayan kaç farklı “ a ” tam sayısı vardır?

How many different integer values of “ a ” are there satisfying the inequality?

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

23) Yanda $y = f(x)$ fonksiyonunun grafiği verilmiştir. Buna göre parabolün alacağı en büyük değer aşağıdakilerden hangisidir?



The graph of function $y = f(x)$ is given at right hand side. What is the maximum value of the parabola?

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

22) $f(x) = ax^2 + bx + c$

ikinci dereceden polinom fonksiyon
 f is a quadratic function

$$a-b=2, \lim_{t \rightarrow 2} \frac{f(-5+3t)-f(5-2t)}{t-2} = 5 \Rightarrow f'(2)=?$$

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

24) $\lim_{x \rightarrow 1} \frac{(2x-3)(\sqrt{x}-1)}{2x^2+x-3} = ?$

- A) $\frac{1}{10}$ B) $-\frac{1}{5}$ C) $\frac{1}{5}$ D) $-\frac{1}{2}$ E) $-\frac{1}{10}$

25) f birebir ve örten fonksiyon
 f is 1-1 and onto function

$$f(4x) - f(4x-1) = \frac{1}{2}, f^{-1}(2) = 0, f^{-1}(a) = 10 \Rightarrow a = ?$$

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

27) $\binom{6}{2} + \binom{7}{3} + \binom{8}{4} + \dots + \binom{16}{12} + 6 = ?$

- A) $\binom{16}{4}$ B) $\binom{16}{5}$ C) $\binom{17}{4}$ D) $\binom{17}{5}$ E) $\binom{18}{4}$

26) $(A^c \cup B^c) \cap (A - B)^c = ?$

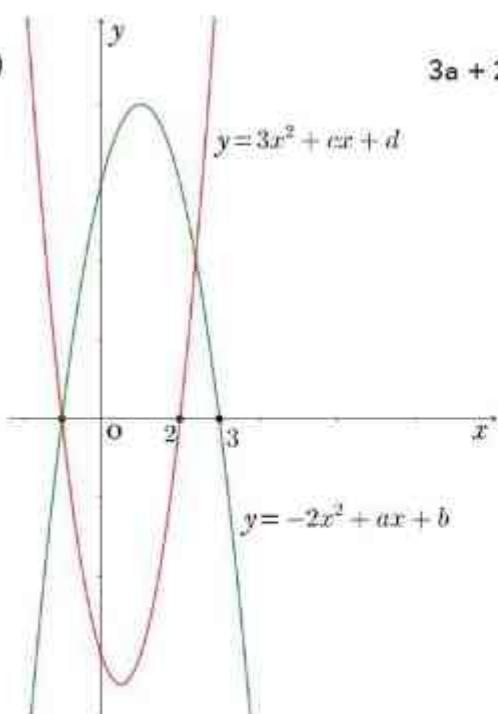
- A) A^c B) B^c C) $A - B$ D) A E) B

28) $(2x + x^2 + 3x^3)^4$ ifadesinin açılımında
 x^7 teriminin katsayısı kaçtır?

What is the coefficient of x^7
in the expansion?

- A) 152 B) 144 C) 156 D) 120 E) 148

29)



$$3a + 2c = ?$$

- A) 12 B) 9 C) 6 D) -6 E) -9

30) Aşağıdakilerden hangisi $x^{622} + x^{1071} + x^{1453} + x^{2022}$ polinomunun $x^4 - x^3 + x^2 - x + 1$ ile bölümünden kalanı verir?

Which of the following is the remainder of the division of the polynomial $x^{622} + x^{1071} + x^{1453} + x^{2022}$ by $x^4 - x^3 + x^2 - x + 1$?

- A) $x^2 + 2x^3$ B) $x + 2x^2 + x^3$ C) $2x^3 + x^3$
 D) $x + 2x^3$ E) $x - 2x^2 + x^3$

$$31) \log(4^x + 3x - 24) = 2x(1 - \log 5) \Rightarrow x = ?$$

- A) 2 B) 3 C) 6 D) 8 E) 9

$$32) \frac{\sin^4 x - 1}{(\cos^2 x - 2)\sin^2 x} = ?$$

- A) $\tan x$ B) $\cot^2 x$ C) $\tan^2 x$
 D) $-\cos^2 x$ E) $-\cot^2 x$

33) $g'(3) = 5$, $h'(3) = -1$, $f(x) = 7g(x) + 2h(x) - 3$
 $\Rightarrow f'(3) = ?$

- A) 33 B) 31 C) 34 D) 30 E) 32

35) $\int_2^9 f(x)dx = \frac{36}{5}$, $\int_2^5 f(x)dx = \frac{27}{5} \Rightarrow \int_5^9 (2f(x) - 3)dx = ?$

- A) -12 B) $-\frac{42}{5}$ C) $\frac{42}{5}$ D) $\frac{18}{5}$ E) $-\frac{18}{5}$

34) $\lim_{x \rightarrow 2} \frac{f(x)-3}{x^2-4} = 5 \Rightarrow \lim_{x \rightarrow 2} \frac{f(x)+6x-15}{x-2} = ?$

- A) 30 B) 20 C) 26 D) 24 E) 16

36) $f(f^{-1}(x)+3) = 5f^{-1}(x)+2 \Rightarrow (f \circ f)(4) = ?$

- A) 45 B) 35 C) 27 D) 22 E) 16

37) $f(x) = x \left[1 + (x + x^2)^3 \right]^2 \Rightarrow f'(1) = ?$

- A) 512 B) 648 C) 729 D) 765 E) 810

39) $\int (x^2 + 2x + f(x))dx = xf(x) + 3x^3 + 1, f(0) = 4 \Rightarrow f(2) = ?$

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

38) $z = a + ib, \bar{z} = a - ib, (3 + 4i)\bar{z} = i - z \Rightarrow z = ?$

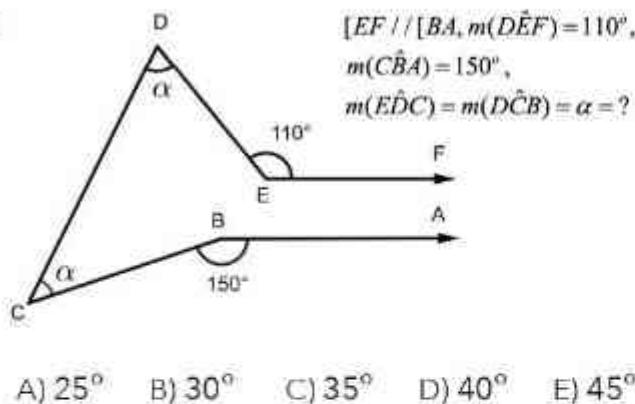
- A) $\frac{1}{6} + \frac{i}{6}$ B) $\frac{1}{8} + \frac{i}{8}$ C) $\frac{1}{8} - \frac{i}{8}$
 D) $-\frac{1}{6} + \frac{i}{6}$ E) $\frac{1}{6} - \frac{i}{6}$

40) $i^2 = -1$ olmak üzere, aşağıdakilerden hangisi sıfır eşit değildir?

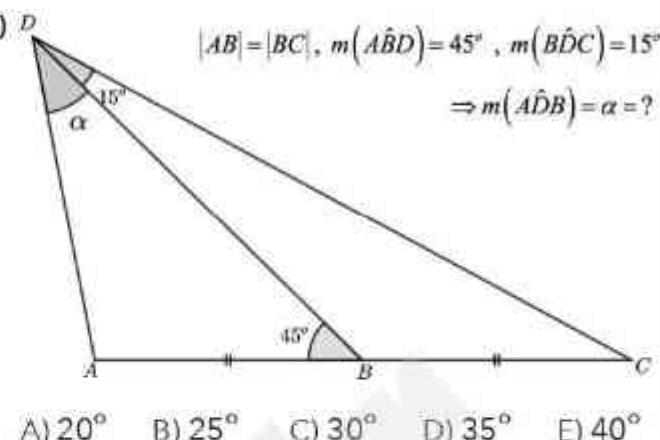
Given that $i^2 = -1$, which of the following expressions is NOT equal to zero?

- A) $i^0 \cdot i^{12}$ B) $i + i^3$ C) $i^4 + i^{10}$ D) $i^{11} - i^9$ E) $i^8 \cdot i^{16}$

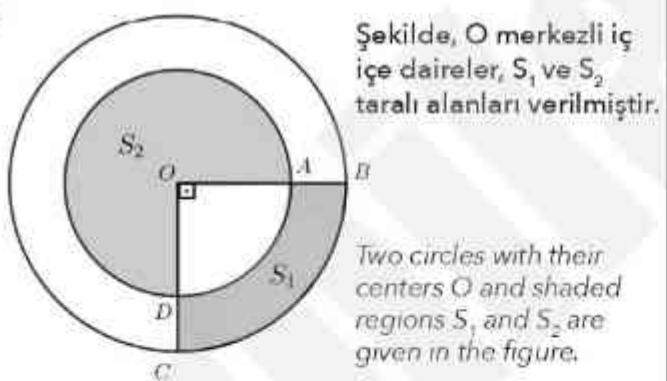
41)



43)



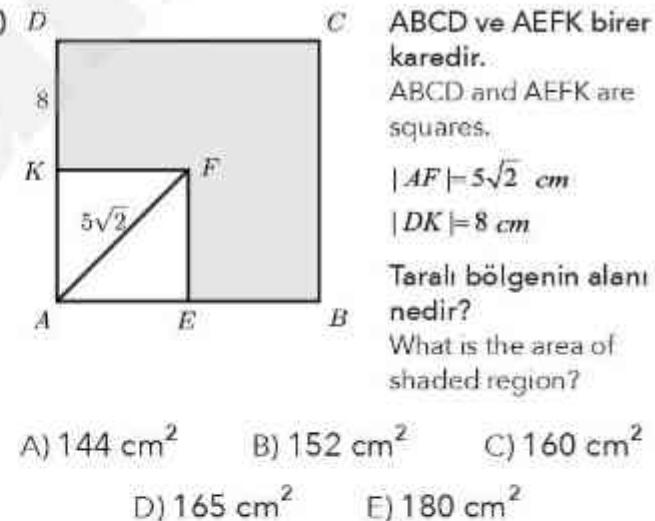
42)

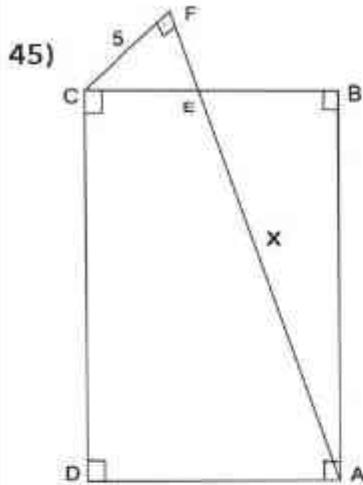


$$[OC] \perp [OB], |OA| = 2|AB| \Rightarrow \frac{S_1}{S_2} = ?$$

- A) $\frac{5}{12}$ B) $\frac{1}{3}$ C) $\frac{3}{4}$ D) $\frac{1}{4}$ E) $\frac{1}{12}$

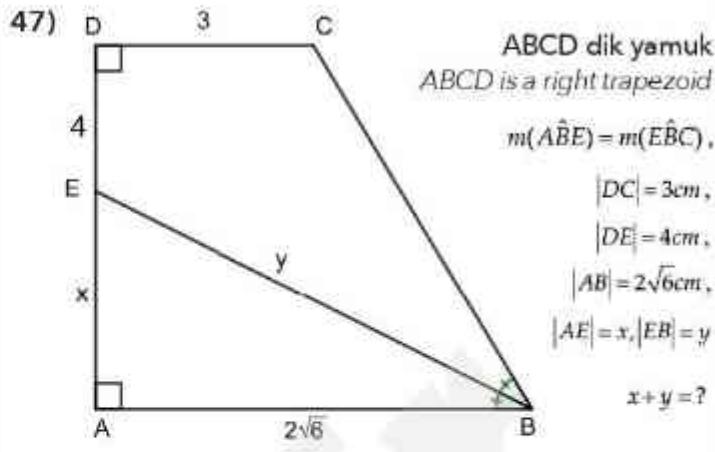
44)





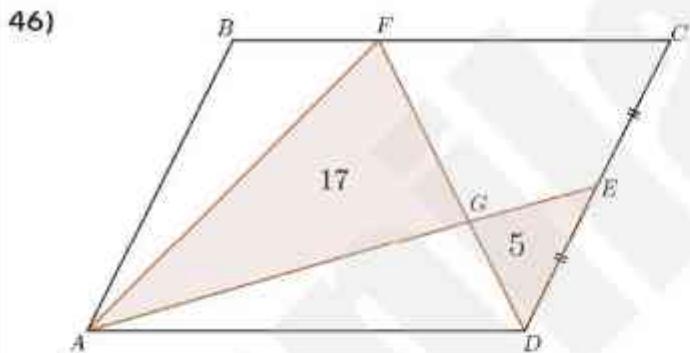
- A) 6 cm B) 8 cm C) 10 cm D) 12 cm E) 16 cm

ABCD dikdörtgen
ABCD is a rectangle
 $|EB| = 2|CE|$, $A(ABE) = 40\text{cm}^2$
 $|AE| = x = ?$



- A) 10 cm B) 12 cm C) 15 cm
D) 18 cm E) 20 cm

ABCD dik yamuk
ABCD is a right trapezoid
 $m(\hat{A}BE) = m(\hat{E}BC)$,
 $|DC| = 3\text{cm}$,
 $|DE| = 4\text{cm}$,
 $|AB| = 2\sqrt{6}\text{cm}$,
 $|AE| = x, |EB| = y$
 $x + y = ?$



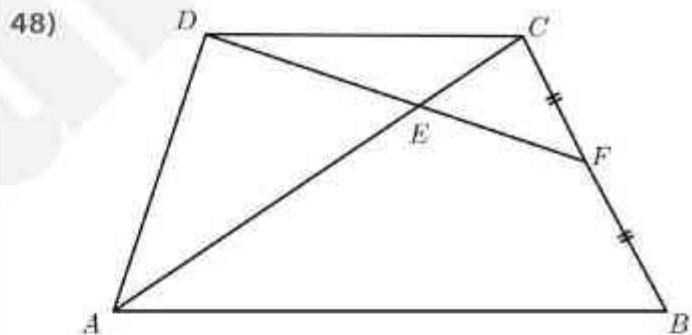
ABCD paralelkenar (parallelogram),
AFD, AED üçgenler (triangles),

$$|DE| = |EC|,$$

$$A(AFG) = 17 \text{ cm}^2, A(DGE) = 5 \text{ cm}^2,$$

$$A(ABCD) = ?$$

- A) 32 cm^2 B) 36 cm^2 C) 40 cm^2
D) 44 cm^2 E) 48 cm^2



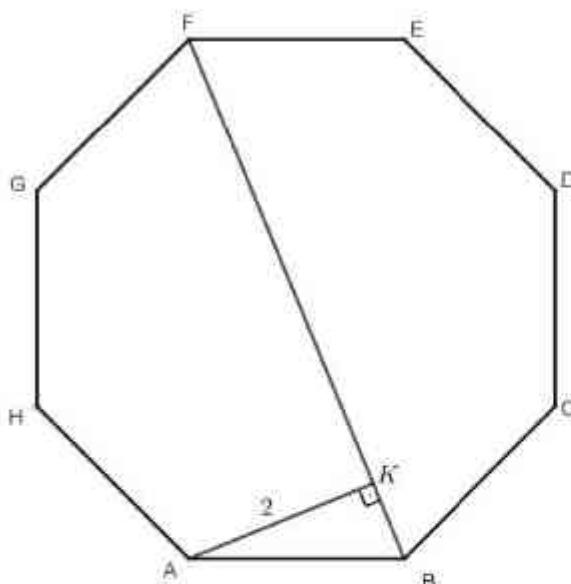
ABCD bir yamuk (ABCD is a trapezoid)

$$A(ADE) = 10 \text{ cm}^2, A(ECF) = 3 \text{ cm}^2,$$

$$|CF| = |FB| \Rightarrow A(ABCD) = ?$$

- A) 42 cm^2 B) 28 cm^2 C) 32 cm^2
D) 35 cm^2 E) 40 cm^2

49)

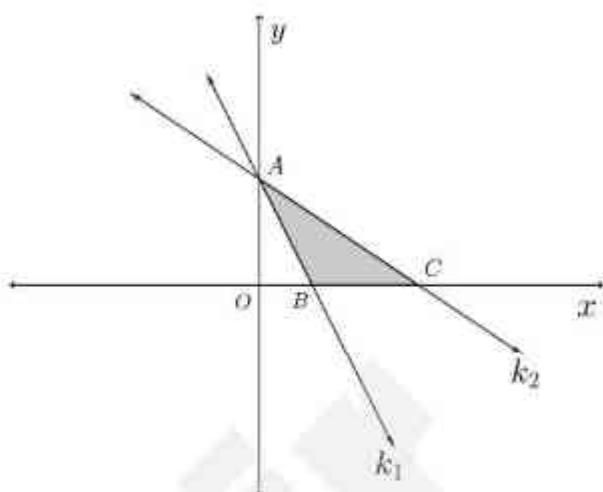


ABCDEFGH düzgün sekizgen (regular octagon)

$$[AK] \perp [BF], |AK| = 2 \text{ cm} \Rightarrow |BF| = ?$$

- A) $4\sqrt{2}$ cm B) $2\sqrt{2}$ cm C) 4 cm
 D) 2 cm E) 8 cm

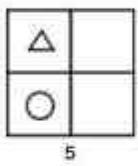
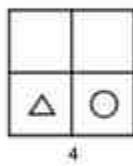
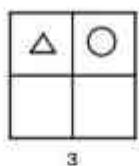
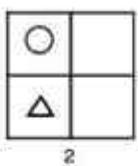
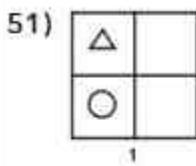
50)



Şekilde k_1 doğrusunun denklemi $2x + y = 4$,
 k_2 doğrusunun denklemi $2x + 3y = 12$ dir.
 Buna göre taralı bölgenin alanı kaçtır?

The equation of the line k_1 is $2x + y = 4$,
 and the equation of the line k_2 is $2x + 3y = 12$.
 What is the area of shaded region?

- A) 16 br^2 B) 12 br^2 C) 8 br^2
 D) 10 br^2 E) 6 br^2

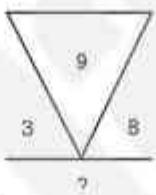
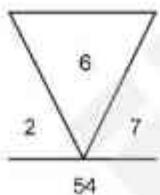
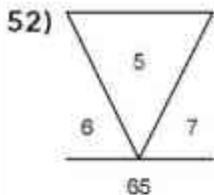
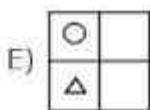
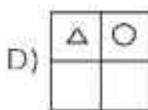
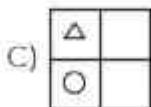
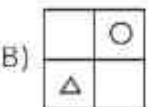
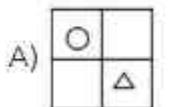


?

6

Yukarıdaki şekiller bir kurala göre dizilmiştir. Bu kurala göre ? ile gösterilen yere aşağıdakilerden hangisi gelmelidir?

Which answer fits in the missing space to complete the pattern?

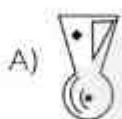
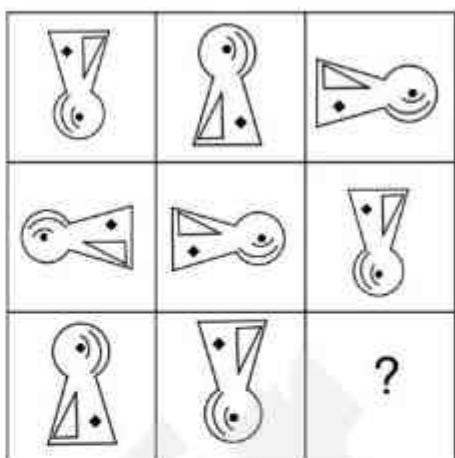


Şekildeki sayılar arasındaki kurala göre, soru işaretinin yerine hangi sayı yazılmalıdır?

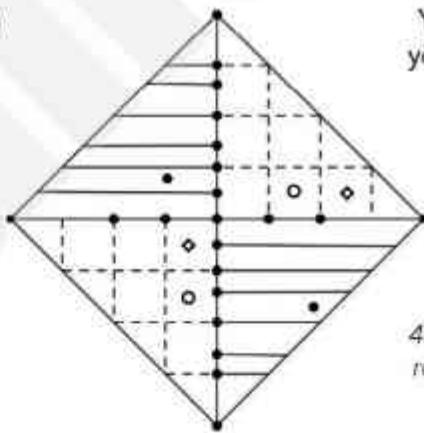
The numbers in the figures above are arranged according to a specific rule. According to this specific rule, which of the followings should be written in place of question mark?

- A) 27 B) 54 C) 81 D) 99 E) 108

53)

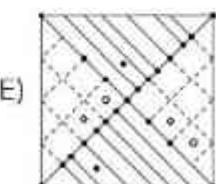
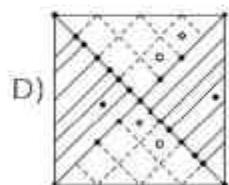
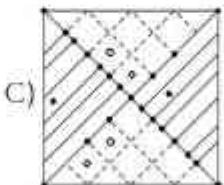
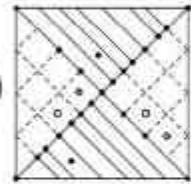
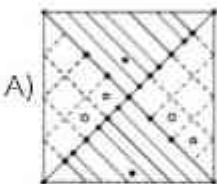


54)



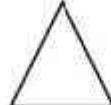
Yandaki şeklin saat yönünde 45 derece döndürülümiş hali aşağıdakilerden hangisidir?

If we perform a 45-degree clockwise rotation to the figure on the left, what do we obtain?



55) 
 $5x - 7 = 13$


 $7x - 9 = 33$


?

Yukandaki geometrik şekiller ile altına yazılan denklemler arasında bir ilişki vardır. Buna göre, soru işaretleri yerine aşağıdaki denklemlerden hangisi gelebilir?

There is a relationship between the geometric figures and the corresponding equations above. Which of the following equations can replace the question mark?

- A) $4x+6=6$ B) $4x-6=6$ C) $4x-6=12$
D) $4x-6=4$ E) $4x+6=12$

56) 9 28 14 7 22 11 ?

- A) 17 B) 18 C) 33 D) 34 E) 35

57)

2	1	9
4	3	8
6	5	a

1	9	2
3	8	b
5	7	6

c	2	7
6	5	4
9	8	1

$a - b + c = ?$

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

58)

 +  =  +  + 

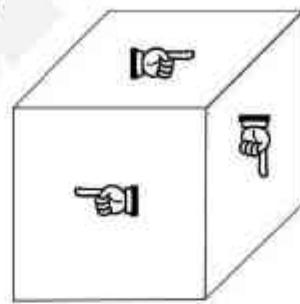
 =  + 

 +  +  +  =  +  + 

 -  = ?

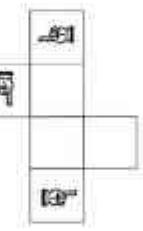
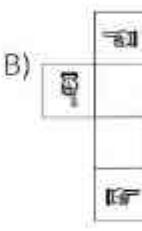
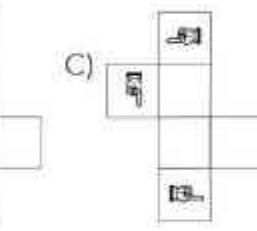
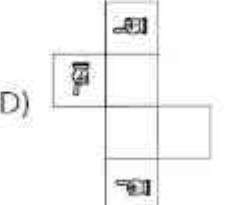
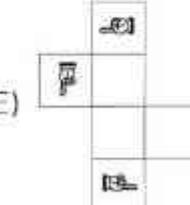
- A)  B)  C) 
D)  + 

59)

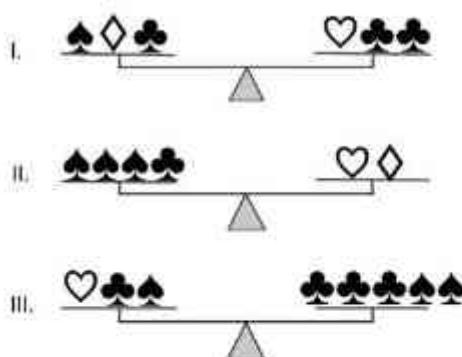


Yan tarafta bir küpün görünen 3 yüzü verilmiştir. Buna göre küpün açılmış hali aşağıdakilerden hangisi olabilir?

Given the 3-face of cube at left hand side; Which one of the following is the extracted form of cube?

- A) 
B) 
C) 
D) 
E) 

60)

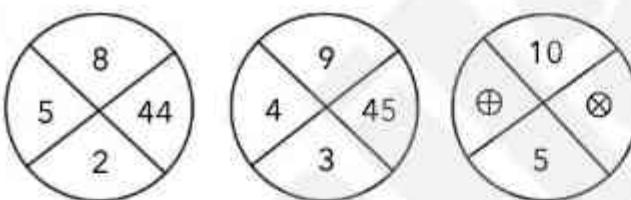


Yukarıda verilen şekilde teraziler dengede olduğuna göre ♥ yerine aşağıdakilerden hangisi getirilmelidir?

All scales are in balance. Which figure can be replaced instead of ♥?

- A) ♣♣ B) ♣♣♣♣ C) ♠♠
 D) ♠♠♠ E) ♦♦

61)



Yukarıdaki çemberlere yerleştirilen sayılar belirli bir kurala göre dizilmiştir. Buna göre ⊕ ve ⊗ simbollerini yerine sırasıyla hangi sayılar gelmelidir?

Above numbers in the circles are written as a given rule.
 Which numbers can be replaced instead of symbols
 ⊕ and ⊗ respectively?

- A) 2 - 64 B) 3 - 55 C) 4 - 45
 D) 5 - 44 E) 6 - 60

62) Aşağıdakilerden hangisi bir yönüyle diğerlerinden farklıdır?

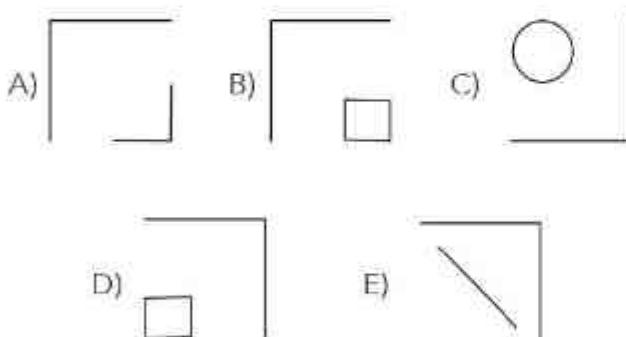
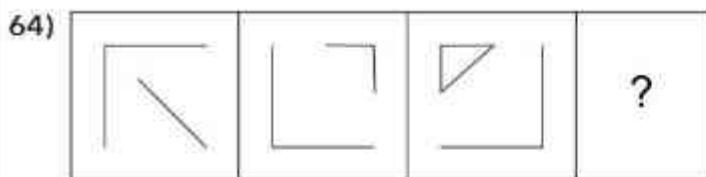
Which of the following is different from others in one aspect?

- | | |
|----|---|
| 1 | 4 |
| 17 | |
- | | |
|----|---|
| 6 | 7 |
| 85 | |
- | | |
|----|---|
| 2 | 5 |
| 29 | |
-
- | | |
|----|---|
| 3 | 8 |
| 69 | |
- | | |
|----|---|
| 7 | 2 |
| 53 | |

63)



- | |
|-----|
| ↑↓→ |
|-----|
- | |
|-----|
| →↑↓ |
|-----|
- | |
|-----|
| ↓↑→ |
|-----|
-
- | |
|-----|
| ↑→↓ |
|-----|
- | |
|-----|
| →↓↑ |
|-----|



65)

12	14	11	13
9	11	8	?
11	13	?	12
8	10	7	?

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

66) Aşağıdaki alfabeyi gözönüne alınız:

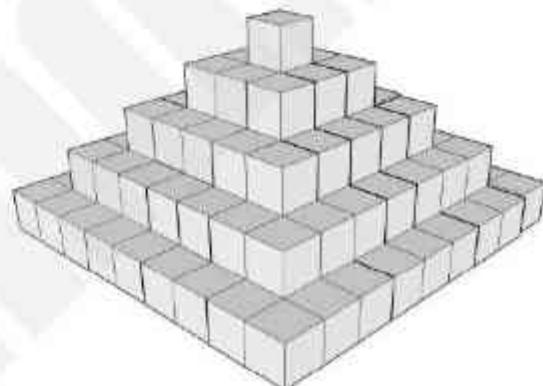
Consider the following series of alphabets:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

LAW 6211121 DEB 223112 PSI 8210151 EGO ?

- A) 3141281 B) 314181 C) 324181
 D) 3142811 E) 3124181

67)

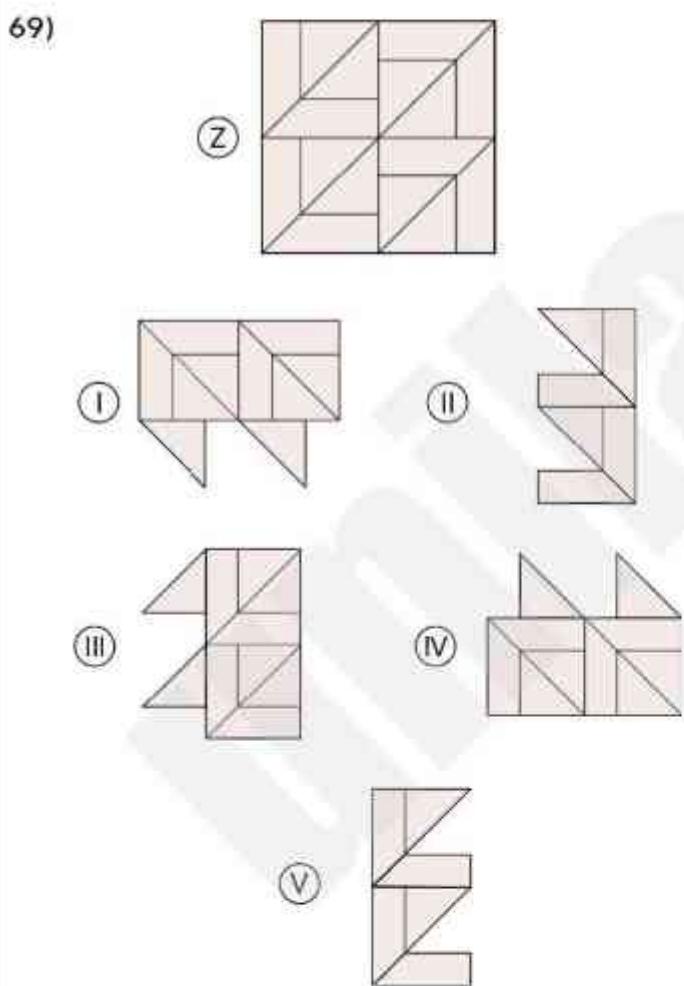


Yukarıdaki piramitin dış yüzeyinde kaç tane kare vardır?

How many squares are on the outer surface of the pyramid above?

- A) 156 B) 144 C) 181 D) 197 E) 168

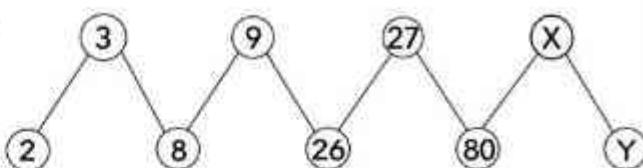
- 68) 5 8 17 44 125 ?
 A) 147 B) 368 C) 189 D) 244 E) 328



Z şeklini oluşturmak için hangi iki şekil kullanılmalıdır?

Which two shapes should be used to create the shape Z?

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

- 70)
- 
- (X,Y) = ?
- A) (81,242) B) (63,242) C) (108,112)
 D) (81,241) E) (108,241)

- 71)
- | | | |
|---|---|---|
| Σ | β | & |
| Δ | γ | ∅ |
| □ | ψ | N |
- | | | |
|---|---|---|
| Λ | Ω | Σ |
| Θ | Ω | Ψ |
| N | Δ | & |
- | | | |
|---|---|---|
| Ω | Ψ | Λ |
| ∅ | N | Δ |
| & | β | Σ |
- | |
|---|
| ? |
|---|
-
- A)

Δ	Ω	β
N	∅	Ψ
Σ	&	ψ
- B)

N	Δ	Ω
Ψ	&	β
Σ	∅	Ψ
-
- C)

Ψ	Ω	β
N	Λ	∅
Δ	Σ	&
- D)

Λ	Σ	∅
Ω	β	Ψ
Δ	&	N
-
- E)

Σ	N	Ψ
β	∅	Ψ
Δ	&	Ω

ADI - SOYADI:

BABA ADI:

ANNE ADI:

2022 كربلا

- A) ADI-SOYADI bölümüne adınızı ve soyadınızı arasında birer boşluk bırakarak yapınız kodlayınız.
 B) Bir kolona birden fazla harf kodlamayın.
 C) Bütün kodlamalar yumuşak kurşun kalemlle yapınız.
 D) Yanıt kağıdını karalamayınız buruşturmayınız.

Başanlar dileriz ...



1 A B C D E	21 A B C D E	41 A B C D E	61 A B C D E
2 A B C D E	22 A B C D E	42 A B C D E	62 A B C D E
3 A B C D E	23 A B C D E	43 A B C D E	63 A B C D E
4 A B C D E	24 A B C D E	44 A B C D E	64 A B C D E
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6 A B C D E	26 A B C D E	46 A B C D E	66 A B C D E
7 A B C D E	27 A B C D E	47 A B C D E	67 A B C D E
8 A B C D E	28 A B C D E	48 A B C D E	68 A B C D E
9 A B C D E	29 A B C D E	49 A B C D E	69 A B C D E
10 A B C D E	30 A B C D E	50 A B C D E	70 A B C D E
11 A B C D E	31 A B C D E	51 A B C D E	71 A B C D E
12 A B C D E	32 A B C D E	52 A B C D E	72 A B C D E
13 A B C D E	33 A B C D E	53 A B C D E	73 A B C D E
14 A B C D E	34 A B C D E	54 A B C D E	74 A B C D E
15 A B C D E	35 A B C D E	55 A B C D E	75 A B C D E
16 A B C D E	36 A B C D E	56 A B C D E	76 A B C D E
17 A B C D E	37 A B C D E	57 A B C D E	77 A B C D E
18 A B C D E	38 A B C D E	58 A B C D E	78 A B C D E
19 A B C D E	39 A B C D E	59 A B C D E	79 A B C D E
20 A B C D E	40 A B C D E	60 A B C D E	80 A B C D E

SINAV NO

YENİ KODAMA

SINIF NO

YÖS SINAVI İŞLEM BÖLÜMLERİ
GEOMETRİ MATEMATİK

SINAV SONUCU
IQ:
MATEMATİK:
GEOMERİ:
TOPLAM:



برنامه زمان بندی آزمون

دوره اول حل سوال

زمان اتمام هندسه	زمان اتمام ریاضی	هوش
دقیقه	دقیقه	دقیقه
زمان اتمام دوره اول سوال ها	زمان اتمام هندسه	هوش

تعداد سوال های حل شده:

هندسه	ریاضی	هوش
عدد	عدد	عدد

دوره دوم حل سوال

زمان حل سوالات	زمان حل شده
عدد	عدد

تعداد سوال های حل شده در دوره دوم: عدد

تعداد سوال باقی مانده

شماره سوال باقی مانده هوش	شماره سوال باقی مانده ریاضی	شماره سوال باقی مانده هندسه
عدد	عدد	عدد

لکسی پاسخگویی برای حل این سوالات: رد کریم شناس

ADI - SOYADI:

BABA ADI:

ANNE ADI:

2020 يارى

- A) ADI-SOYADI bölümüne adınızı ve soyadınızı aralarında birer boşluk bırakarak yapınız.
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Başanlar dileriz ...



1	E	B	C	D	E	21	E	B	C	D	E	41	A	B	C	D	E	61	A	B	C	D	E
2	A	B	C	D	E	22	A	B	C	D	E	42	E	B	C	D	E	62	A	B	C	D	E
3	A	B	C	D	E	23	A	B	C	D	E	43	A	B	C	D	E	63	A	B	C	D	E
4	A	B	C	D	E	24	A	B	C	D	E	44	A	B	C	D	E	64	A	B	C	D	E
5	A	B	C	D	E	25	A	B	C	D	E	45	A	B	C	D	E	65	A	B	C	D	E
6	A	B	C	D	E	26	A	B	C	D	E	46	E	B	C	D	E	66	A	B	C	D	E
7	E	B	C	D	E	27	A	B	C	D	E	47	E	B	C	D	E	67	E	B	C	D	E
8	A	E	C	D	E	28	A	B	C	D	E	48	A	B	C	D	E	68	A	B	C	D	E
9	A	B	C	D	E	29	A	B	C	D	E	49	A	B	C	D	E	69	A	B	C	D	E
10	A	E	C	D	E	30	A	B	C	D	E	50	E	B	C	D	E	70	A	B	C	D	E
11	A	E	C	D	E	31	A	B	C	D	E	51	A	B	C	D	E	71	A	B	C	D	E
12	A	B	C	D	E	32	A	B	C	D	E	52	A	B	C	D	E	72	A	B	C	D	E
13	A	B	C	D	E	33	A	B	C	D	E	53	A	B	C	D	E	73	A	B	C	D	E
14	A	E	C	D	E	34	E	B	C	D	E	54	A	B	C	D	E	74	A	B	C	D	E
15	A	B	C	D	E	35	A	B	C	D	E	55	A	B	C	D	E	75	E	B	C	D	E
16	A	B	C	D	E	36	E	B	C	D	E	56	A	B	C	D	E	76	A	B	C	D	E
17	A	B	C	D	E	37	E	B	C	D	E	57	A	B	C	D	E	77	A	B	C	D	E
18	A	B	C	D	E	38	A	B	C	D	E	58	A	B	C	D	E	78	E	B	C	D	E
19	A	E	C	D	E	39	A	B	C	D	E	59	A	B	C	D	E	79	E	B	C	D	E
20	A	B	C	D	E	40	A	B	C	D	E	60	A	B	C	D	E	80	A	B	C	D	E

SINAV NO

SINIF NO

YÖS SINAVI İŞLEM BÖLÜMÜ

SINAV SONUCU

İQ:

MATEMATİK:

GEOMERİ:

TOPLAM:

برنامه زمان بندی آزمون

دوره اول حل سوال

زمان اتمام هوش	زمان اتمام ریاضی	زمان اتمام هندسه
دقیقه	دقیقه	دقیقه
زمان اتمام دوره اول سوال ها		

تعداد سوال های حل شده:

هندسه	ریاضی	هوش
عدد	عدد	عدد

دوره دوم حل سوال

زمان حل سوالات	زمان حل شده
عدد	عدد

تعداد سوال های حل نشده در دوره دوم: عدد

تعداد سوال باقی مانده:

شماره سوال	شماره سوال باقی مانده ریاضی	شماره سوال باقی مانده هندسه
عدد	عدد	عدد

نکیک باسخگویی برای حل این سوالات: رد گزینه شناسی

ADI - SOYADI:

BABA ADI:

ANNE ADI:

2021 كربلا

- A) ADI-SOYADI bölümüne adınızı ve soyadınızı aralarında birer boşluk bırakarak yapınız.
- B) Bir kolona birden fazla harf kodlamayın.
- C) Bütün kodlamalar yumuşak kurşun kalemlle yapınız.
- D) Yanıt kağıdını karalamayınız buruşturmayınız.

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15 B C D E	35 A B C D E	55 A B C D E	75 A B C D E
16 A B C D E	36 A B C D E	56 A B C D E	76 A B C D E
17 A B C D E	37 A B C D E	57 A B C D E	77 A B C D E
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SINAV NO

SINIF NO

YANUS SODLAMA

YÖS SINAVI İŞLEM BÖLÜMÜ

GEOMETRİ MATEMATİK IQ

SINAV SONUÇU

IQ:

MATEMATİK:

GEOMERİ:

TOPLAM:



برنامه زمان بندی آزمون

دوره اول حل سوال

زمان اتمام هوش	زمان اتمام ریاضی	زمان اتمام هندسه
دقیقه	دقیقه	دقیقه
زمان اتمام دوره اول سوال ها		

تعداد سوال های حل شده:

هندسه	ریاضی	هوش
عدد	عدد	عدد

دوره دوم حل سوال

زمان حل سوالات	زمان حل شده
عدد	عدد

تعداد سوال های حل نشده در دوره دوم: عدد

شماره سوال باقی مانده هندسه	شماره سوال باقی مانده ریاضی	شماره سوال باقی مانده هوش
عدد	عدد	عدد

تکمیل پاسخگویی برای حل این سوالات: رد گزینه شناسی



ULUSLARARASI ÖĞRENCİ SINAVI | INTERNATIONAL STUDENT EXAM
TEMEL ÖĞRENME BECERİLERİ TESTİ | BASIC LEARNING SKILLS TEST

22.08.2020

A

GENEL AÇIKLAMA
GENERAL INSTRUCTIONS

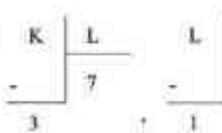
ADI NAME	_____
SOYADI SURNAME	_____
ADAY NO APPLICANT NUMBER	_____
SINAV SALON NO. EXAM ROOM NUMBER	_____

Adınızı, soyadınızı, aday numarası ve sınav salon numaralarınızı yukarıya yazınız.
Write your name, surname, applicant number and exam room numbers in the appropriate places above.

Bu testlerin her hakkı saklıdır; hangi amaçla olursa olsun, testlerin tamamının veya bir lesminin Merkezimizin yazılı izni olmadan kopya edilmesi, fotoğrafının çekilmesi, herhangi bir yolla çoğaltılması, yayımılanması ya da kullanılması yasaktır. Bu yasağa uymayanlar genelii ceza sorumluluğunu ve testlerin hazırlanmasındaki malî tüketti paginen, kabul etmemis sayılır.

ONDALIK KESİRLERİ GÖSTERMEK İÇİN
TÜRKÇE METİNLERDE VİRGÜL (,) KULLANILIR.

DECIMALS ARE INDICATED BY A COMMA (,) IN TURKISH.

1.  $\rightarrow \frac{K+2L+3M-12}{6M} = ?$

A) 8 B) 2 C) 4 D) 6 E) 0

3. $\frac{2-(-2)^3}{(-2)^2-(-1)^{-1}} = ?$

A) $-\frac{24}{3}$ B) $\frac{25}{3}$ C) 4 D) 6 E) 8

2. $\frac{1}{3} + \left[\frac{1,26}{12,6} + \left(\frac{0,1}{4} - \frac{2}{5} \right) \right] = ?$

A) $\frac{1}{3}$ B) $\frac{1}{5}$ C) $\frac{1}{15}$ D) $\frac{1}{45}$ E) $\frac{3}{5}$

4. $\alpha = 3 \pmod{7} \rightarrow \alpha^3 + 2\alpha^2 + 1 = ? \pmod{7}$

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

5. $\frac{0,1}{1 + \frac{1}{(0,1)^{-1}} - \frac{1}{1 + (0,1)^{-1}}} = ?$

- A) $\frac{10}{11}$ B) $\frac{11}{21}$ C) $\frac{110}{111}$ D) 11 E) $\frac{11}{111}$

7. $\sqrt[3]{2^x} + \sqrt[3]{4^x} + \sqrt[3]{8^x} = 48 \Rightarrow x = ?$

- A) 16 B) 12 C) 8 D) 6 E) 4

6.
$$\begin{array}{r} XY \\ \times Z \\ \hline 1224 \end{array}$$
 $\therefore Y+Z=10 \quad \Rightarrow \quad X,Y,Z=?$

- A) 36 B) 48 C) 56 D) 72 E) 96

8.
$$\left. \begin{array}{l} x + \frac{3}{y} = 4 \\ y + \frac{3}{x} = 8 \end{array} \right\} \Rightarrow \frac{y+x}{y-x} = ?$$

- A) 1 B) 3 C) 4 D) $\frac{8}{3}$ E) 2

9. $\frac{-a}{3} = \frac{-b}{4} = \frac{-c}{8}$, $a + c = 2b + 9 \Rightarrow \frac{c-a}{b} = ?$

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

10. $\frac{27^{2n} - 9^{3n+1}}{3^{6n-1}} - \frac{4^{3n} - 8^{2n-1}}{2^{6n-3}} = ?$

- A) 32 B) -31 C) -16 D) 16 E) $\frac{43}{24}$

11. $\frac{x^2 - y^2 - 4y - 4}{x^2 - 2xy + y^2 - 4} = ?$

- A) $\frac{x-y-2}{x-y+2}$ B) $\frac{x+y+2}{x-y+2}$ C) $\frac{x+y-2}{x+y+2}$

- D) $\frac{x-y+2}{x+y+2}$ E) $\frac{x-y+2}{x-y-2}$

12. $x = \frac{1}{a} + \frac{1}{b}$
 $y = \frac{1}{a} - \frac{1}{b}$ $\Rightarrow \frac{x^2b - y^2b}{x+y} - 1 = ?$

- A) $a-1$ B) $\frac{a}{b}-1$ C) $ab-1$ D) 1 E) -1

13. $\begin{cases} \sqrt[3]{3^a} = 4 \\ 2^{2x} = 27 \end{cases} \rightarrow a = ?$

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

14. $\frac{6}{1 + \frac{4}{1 + \frac{1}{2+x}}} = 2 \rightarrow x = ?$

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

15. $(7x-120)^{\frac{3x-17x}{3}} = 1$

eşitliğini sağlayan x sayılarının toplamı kaçtır?

What is the sum of the number of x that provide the equality?

- A) $\frac{245}{7}$ B) $\frac{254}{7}$ C) $\frac{323}{7}$ D) $\frac{373}{7}$ E) $\frac{377}{7}$

16. $a, b, c \in \mathbb{R}^+, a.b = \frac{4}{9}, a.c = \frac{1}{3}, b.c = \frac{3}{4}$

ise aşağıdakilerden hangisi doğrudur?

If $a, b, c \in \mathbb{R}^+, a.b = \frac{4}{9}, a.c = \frac{1}{3}, b.c = \frac{3}{4}$ then which of the following is true?

- A) $c < b < a$ B) $c < a < b$ C) $a < c < b$
 D) $a < b < c$ E) $b < a < c$

17. $\frac{8x+9}{(2x-3)^2} > 1$ eşitsizliğini sağlayan tüm x sayılarının lüemesi nedir?

What is the set of all number of x that provide the inequality?

- A) $(-1, 6)$ B) $(-1, 6) \cup \left[-\frac{3}{2}\right]$ C) $(0, 6) \cup \left[-\frac{3}{2}\right]$
 D) $(0, 5) \cup \left[\frac{3}{2}\right]$ E) $(-1, 5) \cup \left[-\frac{3}{2}\right]$

18. $x = |x|$
 $x, y < 0$ $\rightarrow |x-y| - |y-x| = ?$

- A) $-2x$ B) $-2y$ C) 0 D) $x-y$ E) $2x$

19. $x < y < 0$, $\frac{\sqrt{y^4} + 2\sqrt{y^2}}{y} - \sqrt{x^2 - 2xy + y^2} = -5 \Rightarrow x = ?$

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

20. $n \in \mathbb{Z}^+, A_n = \left\{ x \in \mathbb{R} : \frac{(-1)^n n}{n+1} < x < \frac{2n}{n+1} \right\} \rightarrow A_5 \setminus (A_1 \cup A_2) = ?$
telegram_yos_books2018

- A) $\left(\frac{-1}{2}, \frac{3}{4}\right)$ B) $\left(\frac{-1}{2}, \frac{3}{4}\right) \cup \left(\frac{3}{4}, \frac{4}{3}\right)$ C) $\left[\frac{-3}{4}, \frac{3}{2}\right)$
 D) $\left[\frac{-3}{2}, \frac{3}{4}\right] \cup \left(\frac{3}{4}, \frac{3}{2}\right]$ E) $\left(\frac{-3}{4}, \frac{-1}{2}\right] \cup \left[\frac{4}{3}, \frac{3}{2}\right)$

21. $s(B) = 6x, s(B \cap A^c) = 9, s(A \cap B) = x^2 \Rightarrow x = ?$

- A) 3 B) 6 C) 9 D) 11 E) 20

23. $f\left(\frac{2x}{3} + 2\right) = \frac{x}{3} - 4, g(x) = \frac{x-5}{2} \Rightarrow (f^{-1} \circ g)(3) = ?$

- A) 6 B) 8 C) 9 D) 11 E) 12

22. $A = \{x: |x+1| \geq 2, x \in \mathbb{R}\}$
 $B = \{x: |x-1| < 5, x \in \mathbb{Z}\} \Rightarrow s(A \cap B) = ?$

- A) 4 B) 5 C) 6 D) 7 E) 8

24. $f(x) = 2^{j-1} f(x-1), f(1) = 1 \Rightarrow f(50) = ?$

- A) 2^{1220} B) 2^{1222} C) 2^{1223} D) 2^{1224} E) 2^{1226}

25. $f(x) = x^2 + x - 1, g(x) = \frac{x-1}{2} \Rightarrow (f \circ g^{-1})(1) = ?$

- A) 1 B) 3 C) 11 D) 13 E) 17

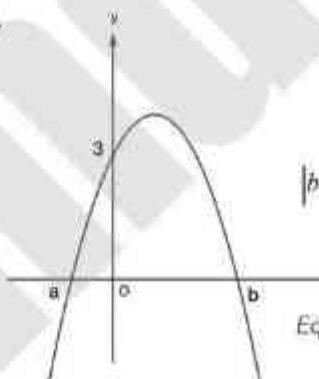
26. $P(x+1) = 3x^2 - 2x + 6 \Rightarrow P(2x-3) \boxed{\begin{array}{c|c} x+2 \\ \hline ? \end{array}}$

- A) 6 B) 22 C) 152 D) 192 E) 214

27. $P(x+3) + P(x+1) = 2x^2 + 8x + 16 \Rightarrow P(3) = ?$

- A) 14 B) 12 C) 8 D) 6 E) 4

28.



Parabolün denklemi

$$y = -x^2 + mx + 3 \text{ tür.}$$

$$|b-a|=4, |b| > |a| \Rightarrow m=?$$

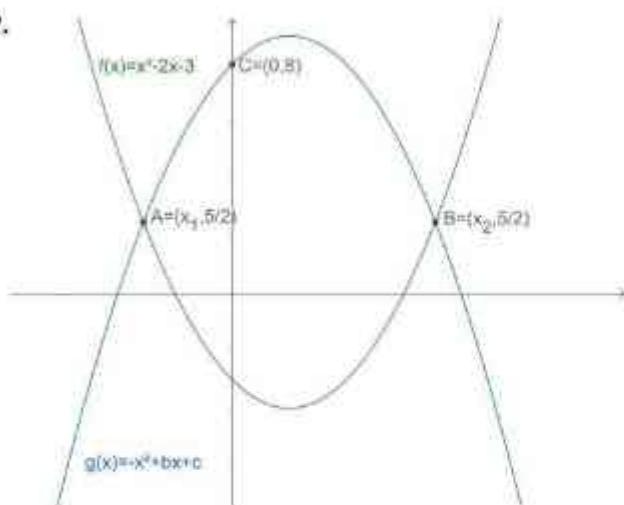
Equation of given parabola is

$$y = -x^2 + mx + 3$$

$$|b-a|=4, |b| > |a| \Rightarrow m=?$$

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

29.

 $f(x)$ ve $g(x)$ parabol $\Rightarrow g(x) = ?$ If $f(x)$ and $g(x)$ are parabolas $\Rightarrow g(x) = ?$

- A) $-x^2 - 2x + 4$ B) $-x^2 + 2x + 4$ C) $-x^2 + 2x + 8$
 D) $-x^2 - 2x - 8$ E) $-x^2 + 2x - 4$

30.

$$z_1 = 3+2i, z_2 = 1-4i \Rightarrow \operatorname{Im}\left(\frac{z_1}{z_2}\right) - \operatorname{Re}\left(\frac{z_1}{z_2}\right) = ?$$

- A) $-\frac{9}{17}$ B) $\frac{9}{17}$ C) $-\frac{19}{17}$ D) $\frac{19}{17}$ E) 19

31.

$$i^2 = -1 \Rightarrow \frac{5}{i^{2020}} - \frac{1+i^{2019}}{1+i^{2021}} = ?$$

- A) $5-i$ B) $5+i$ C) $\frac{1-i}{2}$ D) $1-i$ E) $1+i$

32. $\log_7 2 = x^2$, $\log_5 7 = y^{-2}$ $\log_{16} 49 = ?$

- A) $\frac{y^2}{x^2y^2+1}$ B) $\frac{x^2}{x^2y^2+1}$ C) $\frac{2}{x^2+y^2}$
 D) $\frac{2}{x^2-y^2+1}$ E) $\frac{1}{x^2y^2+1}$

33. $\frac{7^x - 7^{-x}}{3} = 2 \rightarrow x = ?$

- A) $-3 + \sqrt{10}$ B) $-3 - \sqrt{10}$ C) $\log_7(-3 - \sqrt{10})$
 D) $\log_7(-3 + \sqrt{10})$ E) $\ln(-1 + \sqrt{7})$

34. $x \in \left(0, \frac{\pi}{2}\right)$ $\tan x = \frac{\log_5 2}{\sqrt{\log_5 \left(\frac{5}{2}\right) \log_5 (10)}} \Rightarrow \sin x = ?$

- A) $\log_5 2$ B) $\log_5 5$ C) $\log_{10} 5$ D) $\frac{1}{2}$ E) $\log_{25} 2$

35. $f(x) = -x^5 + ax^3 - 5x + 3$, $g(x) = 3x^4 + 2$

$$\frac{d}{dx}(f+g)(1) = 8 \rightarrow a = ?$$

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

36. $f(x) = \frac{x^3 - 1}{2x - 1} \rightarrow f'(1) = ?$

- A) -1 B) 0 C) $\frac{1}{3}$ D) $\frac{1}{2}$ E) 1

37. $\lim_{x \rightarrow 0} \frac{f(x)}{x^2 - 1} = 5 \rightarrow \lim_{x \rightarrow 0} \frac{5f(x)}{x - 1} = ?$

- A) 25 B) 5 C) 1 D) 0 E) -5

38. $\lim_{x \rightarrow 1} \frac{\sqrt[3]{x-1}}{\sqrt{x-1}} = ?$

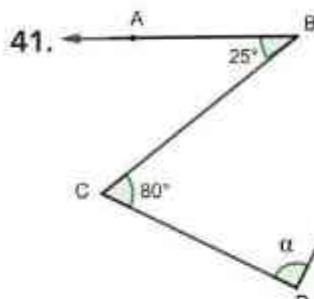
- A) $\frac{1}{3}$ B) 1 C) $\frac{2}{3}$ D) $\frac{3}{2}$ E) 0

39. $\int_0^b f(x)f'(x) dx = 54, f(a) - f(b) = 18 \rightarrow \frac{f(b)}{f(a)} = ?$

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

40. $\int_{-1}^1 |1-x^2| dx = ?$

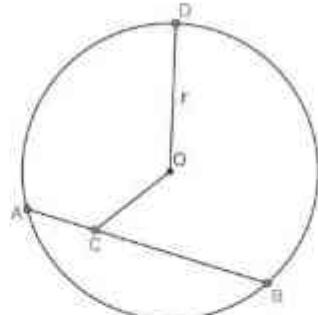
- A) $\frac{4}{3}$ B) $\frac{8}{3}$ C) $-\frac{4}{3}$ D) $-\frac{8}{3}$ E) 3



- A) 65° B) 70° C) 75° D) 80° E) 85°

$$\begin{aligned}AB \parallel EF \\ m(ABC) &= 25^\circ \\ m(DEF) &= 140^\circ \\ m(BCD) &= 80^\circ \\ m(CDE) &= \alpha = ?\end{aligned}$$

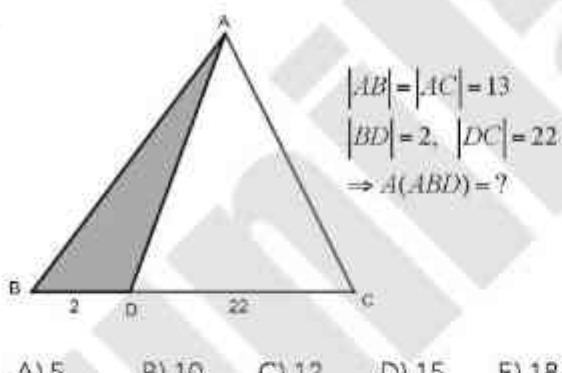
43.



$$\begin{aligned}|AB| &= 8 \\ |BC| &= 6 \\ |OC| &= 2\sqrt{3} \\ \Rightarrow |OD| &=?\end{aligned}$$

- A) 2 B) $2\sqrt{2}$ C) $2\sqrt{3}$ D) 4 E) $2\sqrt{6}$

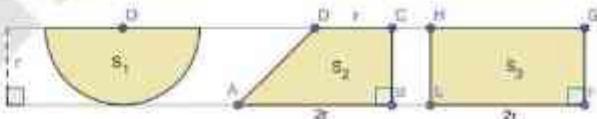
42.



- A) 5 B) 10 C) 12 D) 15 E) 18

$$\begin{aligned}|AB| &= |AC| = 13 \\ |BD| &= 2, |DC| = 22 \\ \Rightarrow A(ABD) &=?\end{aligned}$$

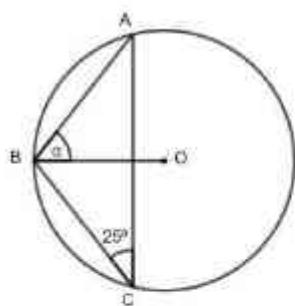
44.



Aşağıdakilerden hangisi doğrudur?

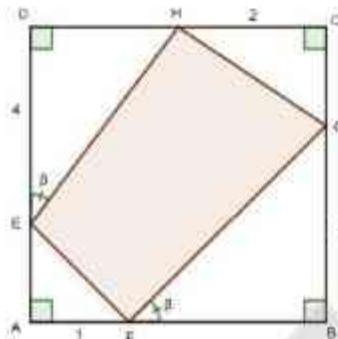
Which of the following sortings is correct?

- A) $S_1 < S_2 < S_3$ B) $S_1 < S_3 < S_2$ C) $S_2 < S_1 < S_3$
 D) $S_2 < S_3 < S_1$ E) $S_3 < S_2 < S_1$

45.

$$\begin{aligned}m(\text{BCA}) &= 25^\circ \\ m(\text{ABO}) &= \alpha = ?\end{aligned}$$

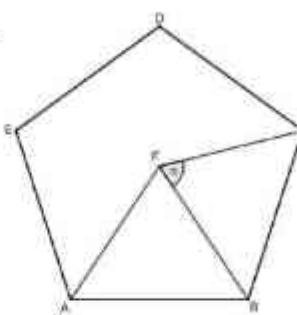
- A) 55° B) 60° C) 65° D) 70° E) 75°

46.

$$\begin{aligned}\text{ABCD} &\text{ bir karedir} \\ m(\text{DEH}) &= m(\text{GFB}) \\ A(\text{EFGH}) &=?\end{aligned}$$

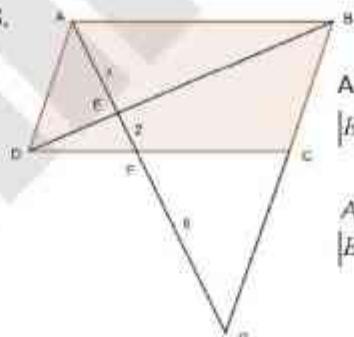
*ABCD is a square
 $m(\text{DEH}) = m(\text{GFB})$
calculate $A(\text{EFGH})$*

- A) $\frac{21}{2}$ B) $\frac{23}{2}$ C) $\frac{25}{2}$ D) $\frac{27}{2}$ E) $\frac{29}{2}$

47.

*ABCDE bir beşgen,
ABCDE is a regular
ABF bir eşkenar üçgendir.
pentagon and ABF is an
equilateral triangle.*

- A) 66° B) 65° C) 64° D) 63° E) 62°

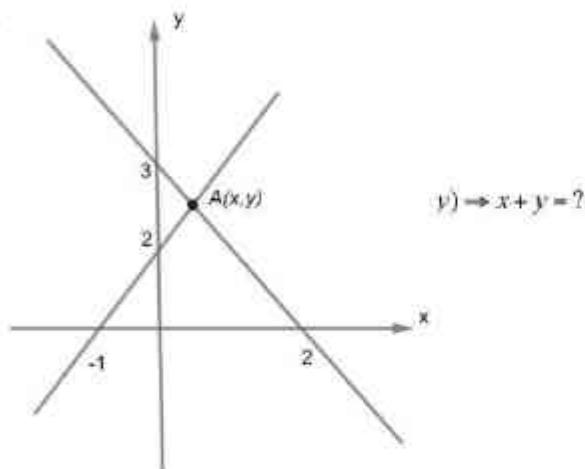
48.

*ABCD paralelkenar
 $|EF| = 2$, $|FG| = 6 \rightarrow x = ?$*

*ABCD is a parallelogram
 $|EF| = 2$, $|FG| = 6 \rightarrow x = ?$*

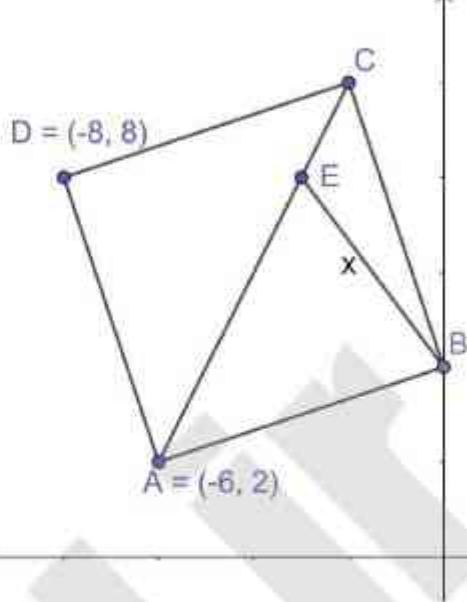
- A) $3\sqrt{2}$ B) $4\sqrt{2}$ C) 2 D) 3 E) 4

49.



- A) $\frac{2}{7}$ B) $\frac{5}{2}$ C) $\frac{10}{7}$ D) 2 E) $\frac{20}{7}$

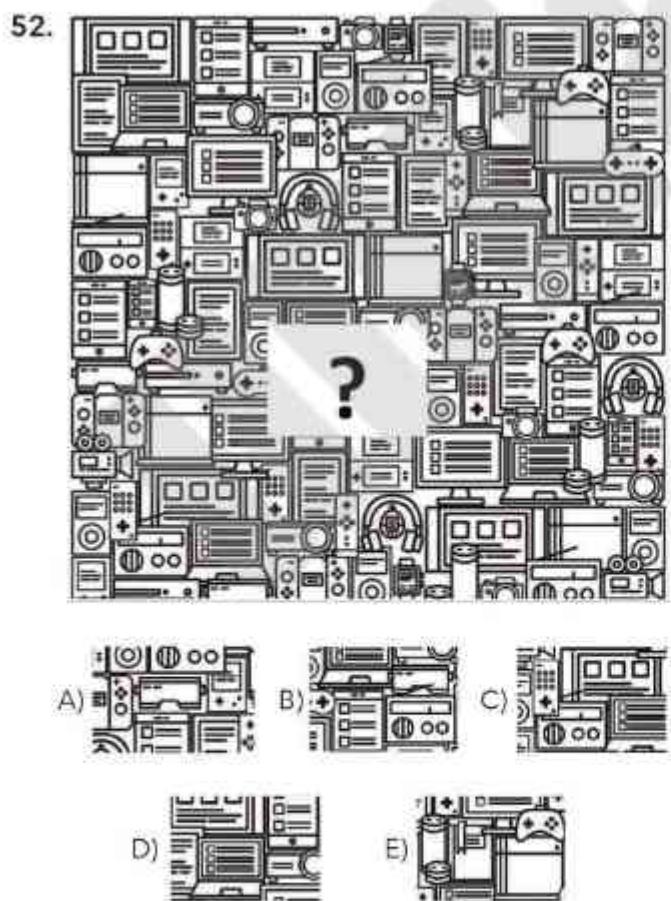
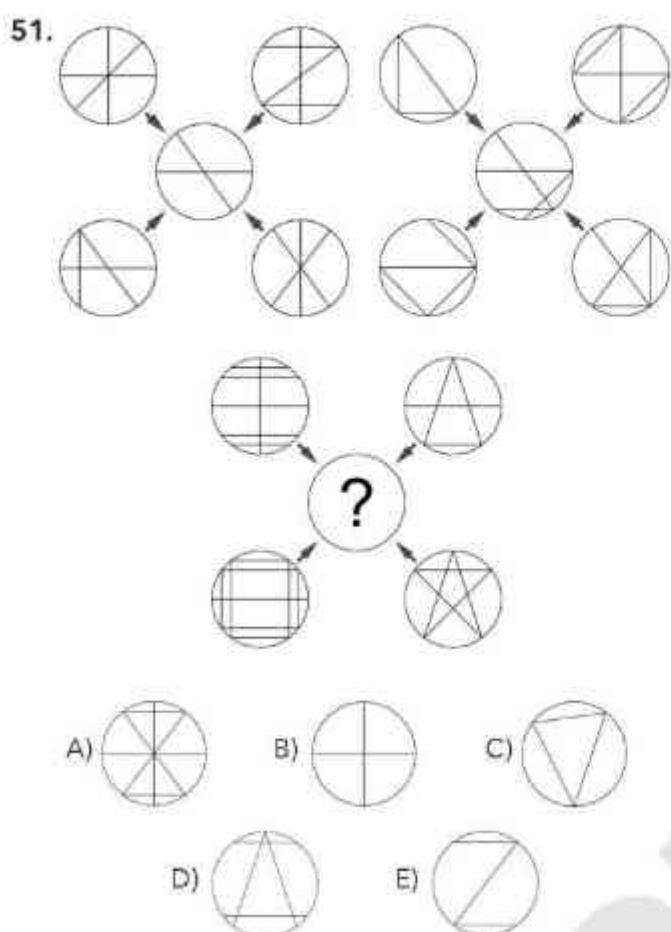
50.



ABCD bir kare ve $|AE| = 3|EC|$ ise
 $|EB|$ 'nin uzunluğu nedir?

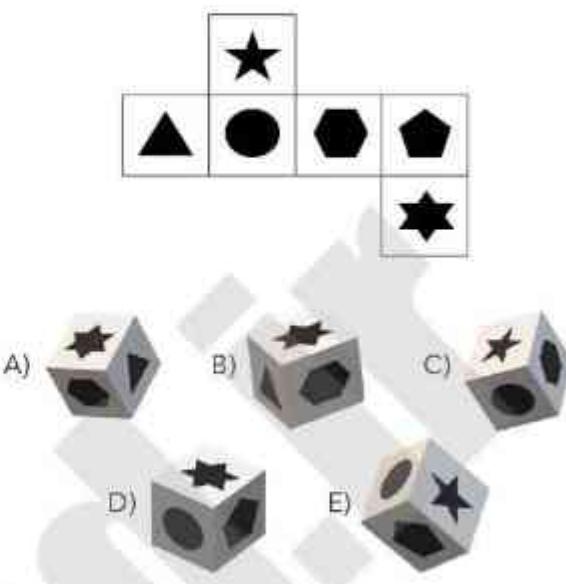
If ABCD is a square and $|AE| = 3|EC|$ then
what is the lenght of the $|EB|$?

- A) 5 B) $3\sqrt{2}$ C) $2\sqrt{5}$ D) 3 E) $3\sqrt{5}$

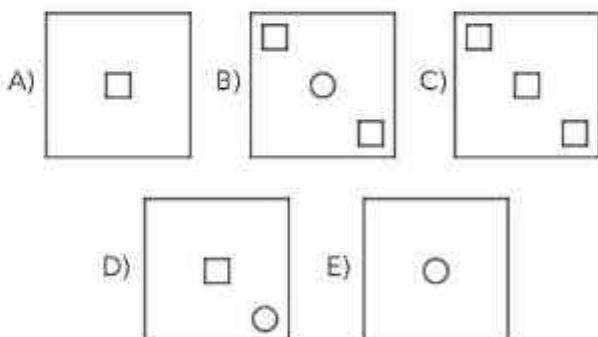
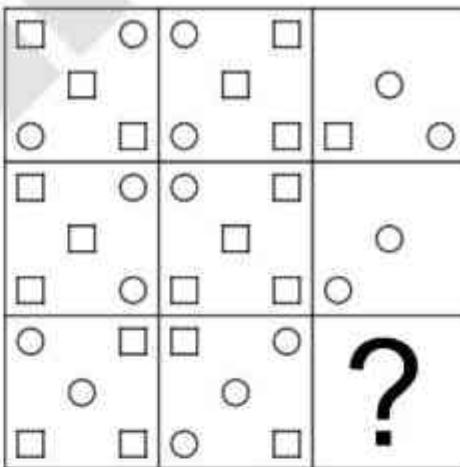


53. Aşağıdaki şenin katlanmasıyla oluşabilecek küp hangisidir?

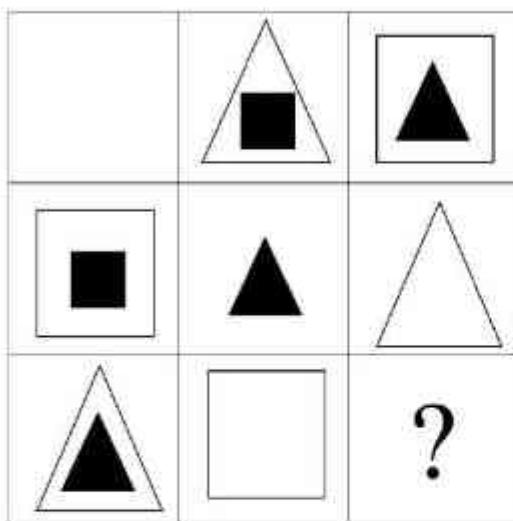
Which cube is the folded form of the following shape?



54.

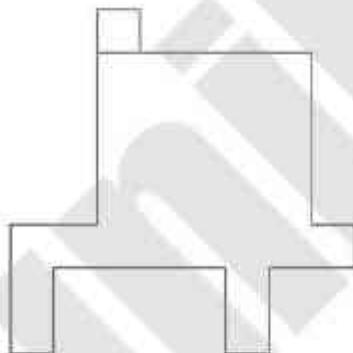


55.



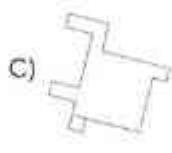
- A) 
 B) 
 C) 
 D) 
 E) 

56.

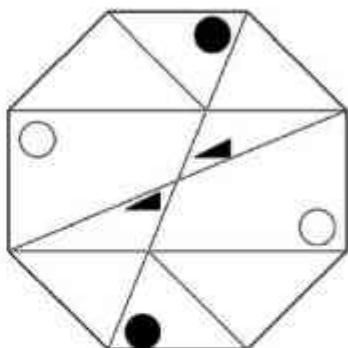


Aşağıdaki şöyleden hangisi yukarıdaki şöyleden özdeştir?

Which shape below is identical to the shape above?

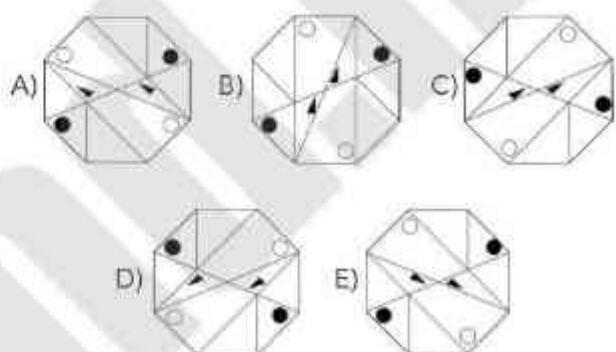
- A) 
 B) 
 C) 
 D) 
 E) 

57.



Yukarıdaki şekil saat yönünde 225 derece döndürülürse aşağıdakilerden hangisi elde edilir?

Which of the following is the shape above rotated by 225 degrees clockwise?

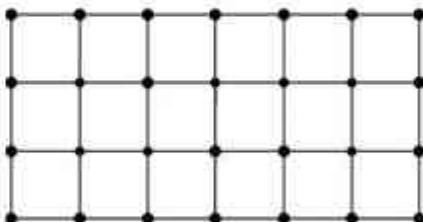


58.

$$\begin{array}{r}
 \text{ABC} \\
 \text{ABC} \\
 \text{ABC} \\
 + \text{ABC} \\
 \hline
 1704
 \end{array}
 \quad A + B = ?$$

- A) 5 B) 6 C) 7 D) 8 E) 9

59.

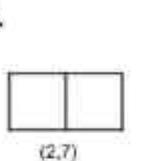


Şekilde kaç adet kibrıt (1 birim uzunluğunda) vardır?

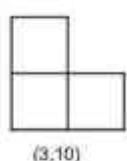
How many matches (1 unit long) are there in that figure?

- A) 32 B) 38 C) 42 D) 45 E) 48

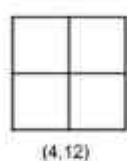
60.



(2,7)



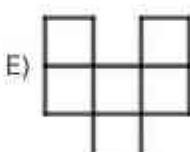
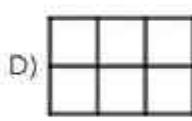
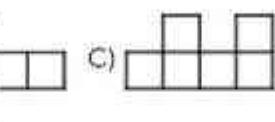
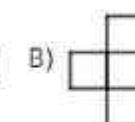
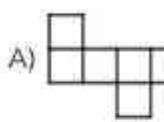
(3,10)



(4,12)

?

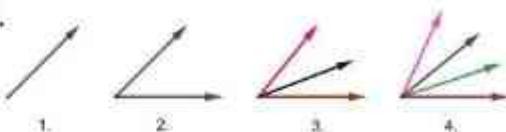
(5,17)

61. Aşağıdaki aritmetik dizİYE göre $a_5 = ?$ According to following arithmetic sequence, calculate a_5

-5	50
↓							↓
a_1							a_{12}

- A) 20 B) 25 C) 30 D) 35 E) 40

62.



1.

2.

3.

4.

...

Number of ray Izin sayıısı	1	2	3	4	5
Number of angle Açı sayısı	0	1	3	6	?

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

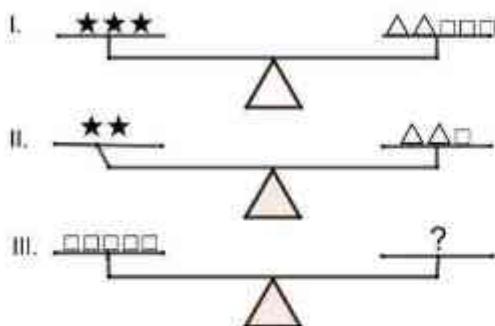
63.

+	★	○	Δ
Δ	⊕	★	○
○	▽	⊕	★

 $\Rightarrow 4\Delta = ?$

- A) ★ B) Δ C) ▽ D) ○ E) ⊕

64.



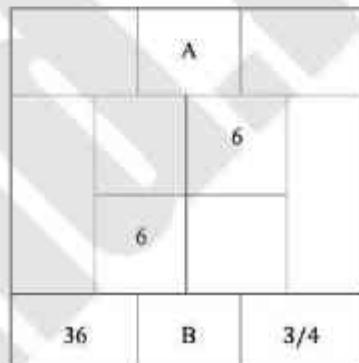
- A) $\star\star\Delta$ B) $\star\Delta\Delta$ C) $\star\star\Delta\Delta$ D) $\star\Delta\Delta\Delta$ E) $\star\star\star\Delta$

66.

$\frac{a}{c}$	$a.b$	d^b
a	b	
c	d	
c^a	$c.d$	$\frac{b}{d}$

Yukarıdaki şekilde a, b, c ve d birer pozitif tamsayıyı göstermektedir. Aşağıdaki verilen şekle göre $B-A=?$

a, b, c and d denote a positive integer in the above figure.
According to the following figure $B-A=?$



65.

$$\begin{array}{l} \Delta \quad \otimes \quad \Diamond \quad \square \\ \otimes \quad \square \quad \oplus \quad \circ \\ \Diamond \quad \circ \quad \otimes \quad \Delta \\ \circ \quad \oplus \quad \square \quad \Diamond \\ \square \quad \Diamond \quad \Delta \quad \oplus \end{array} \left. \right\} \begin{array}{lll} 5123 & 1765 & 2671 \\ 3256 & 6537 & \end{array}$$

$$\circ \quad \oplus \quad \square \quad \Diamond = ?$$

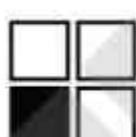
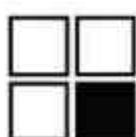
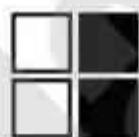
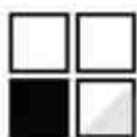
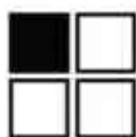
- A) 1765 B) 5123 C) 6537 D) 3256 E) 2671

- A) 30 B) 36 C) -12 D) 15 E) -9

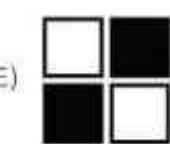
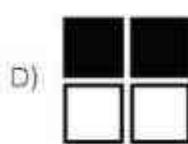
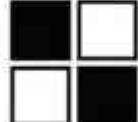
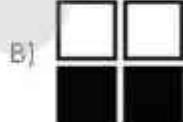
67. $2, 6, 12, x, 42, \dots$ $x = ?$

- A) 14 B) 20 C) 24 D) 34 E) 40

68.

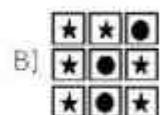


?



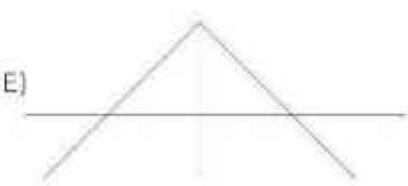
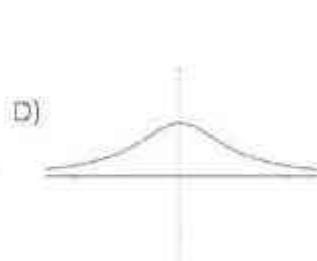
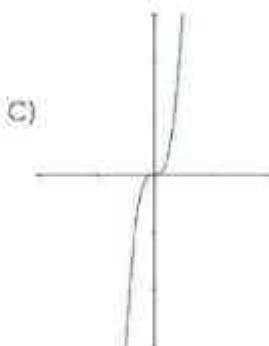
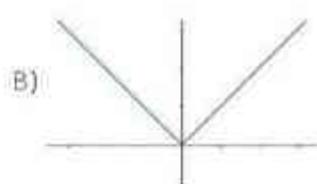
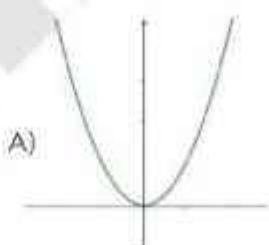
69.

?



70. Hangisi farklıdır?

Which one is different?



ULUSLARARASI ÖĞRENCİ SINAVI | INTERNATIONAL STUDENT EXAM
TEMEL ÖĞRENME BECERİLERİ TESTİ | BASIC LEARNING SKILLS TEST

12.06.2021

AGENEL AÇIKLAMA
GENERAL INSTRUCTIONS

Bu sınavdaki soruların nasıl cevaplanacağı, testlerin başında açıklanmıştır. Soruları cevaplamaya başlamadan önce bu açıklamaları dikkatle okuyunuz.

Bu testlerdeki her sorunun bir tek doğru cevabı vardır. Bir soru için birden çok cevap işaretlenmişse, o soru yanlış cevaplanmış sayılacaktır.

Cevaplarınızı koyu siyah ve yumuşak bir kurşun kalemlle işaretleyiniz. İşaretlerinizi cevap yerinin dışına taşırmamayın. Tükenmez kalem veya dolma kalem kullanmayın.

Cevap kağıdınızı borusutmayınız, katlamayınız ve üzerine gereksiz hiçbir işaret koymayınız.

Değiştirmek istediğiniz bir cevabı, yumuşak bir silgiyle, cevap kağıdını öselemeden, temizce siliniz ve yeni cevabınızı işaretlemeyi unutmayın.

Adayların sınav puanı, doğru cevaplar dikkate alınarak yüz (100)'luk sistem üzerinden hesaplanacaktır. Yanlış cevaplar sınav sonucuna herhangi bir etki yapmayacağından emin olun.

Sınavda uygulanacak diğer kurallar bu kitabıñ arkasında belirtilecektir.

How to answer the questions in this exam is explained at the beginning of each question. Read these explanations carefully before answering the questions.

Each question in these tests has only one correct answer. If more than one answer place is marked for a question, that question will be deemed to have been answered incorrectly.

Mark your answers with a dark-black soft pencil. Fill in the circle completely for the answer you have chosen, but make sure your mark does not go beyond the borders of the circle. Do not use any sort of ballpoint or fountain pens.

Keep the answer sheet flat and do not fold or crease it. Do not place any unnecessary marks on it.

Completely erase and clean the answer you want to change with a soft eraser. Do not forget to mark your new answer.

Exam scores of the candidates will be calculated according to the hundred (100) evaluation system by taking the correct answers only into consideration. Wrong answers will not have any effect on the test result.

Other rules and regulations to be followed in the exam are indicated on the back cover of this booklet.

ADI NAME	_____
SOYADI SURNAME	_____
ADAY NO APPLICANT NUMBER	_____
SINAV SALON NO EXAM ROOM NUMBER	_____

IMZA
SIGN

Adınızı, soyadınızı, aday numarası ve sınav salon numaranızı yukarıda yazınız.
Write your name, surname, applicant number and exam room numbers in the appropriate places above.

Bu testin her hakkı saklıdır. Hangi amaçla olursa olsun, testlerin tamamının veya bir kısmının Merkezimizin yazılı izni olmadan kopya edilmesi, fotoğrafının çekilmesi, herhangi bir yolla çoğaltılması, yayımlanması ya da kullanılması yasaktır. Bu yasağı uymayanlar gerekli cezai sorumluluðu ve testlerin hazırlanmasındaki mali külfeti paginen kabullenmiş sayılır.

ONDALIK KESİRLERİ GÖSTERMEK İÇİN
TÜRKÇE METİNLERDE VİRGÜL (,) KULLANILIR.

DECIMALS ARE INDICATED BY A COMMA (,) IN TURKISH.

1. a ve b pozitif tamsayılardır. $a+b=32$ olduğuna göre ab çarpımının en büyük değeri kaçtır?

Let a and b are positive integers and $a+b=32$, then what is the maximum value of the product a and b ?

- A) 225 B) 256 C) 300 D) 320 E) 255

3. $0 < A < C < B$,

$$\begin{array}{r} ABC \longdiv{5} \\ \underline{-} \\ 0 \end{array} \quad \begin{array}{r} BCA \longdiv{4} \\ \underline{-} \\ 0 \end{array} \quad \begin{array}{r} CAB \longdiv{3} \\ \underline{-} \\ 0 \end{array}$$

$$A \cdot B \cdot C = ?$$

- A) 30 B) 50 C) 80 D) 120 E) 210

2. $(0,05)^{-1} + \frac{0,55}{0,011} - \frac{0,7}{0,01} = ?$

- A) 0 B) $\frac{1}{2}$ C) 50 D) 70 E) 140

4. $\sqrt{2} (\sqrt{18} + \sqrt{50} - \sqrt{8} - 5\sqrt{2}) = ?$

- A) 1 B) 2 C) 3 D) $3\sqrt{2}$ E) $4\sqrt{2}$

5. $\frac{bc}{a} = 1, \frac{ac}{b} = 3, \frac{ab}{c} = 4 \Rightarrow a^2 + b^2 + c^2 = ?$

- A) 9 B) 12 C) 15 D) 19 E) 22

7. $x^2 - 3x - 3 = 0 \Rightarrow x^2 + \frac{9}{x^2} = ?$

- A) 12 B) 15 C) 3 D) 9 E) 6

6. $521 \cdot 523 - 517 \cdot 522 - 9 = ?$

- A) 2600 B) 2620 C) 2640 D) 2660 E) 2680

8. $x^3 < x < x^2$ ve $y^2 < y$ ise aşağıdakilerden hangisi daima doğrudur?

If $x^3 < x < x^2$ and $y^2 < y$ then which of the following is always true?

- A) $x+y>1$ B) $xy<-2$ C) $xy>0$
 D) $\frac{x}{y} + \frac{y}{x} < 0$ E) $y > x^2$

9. Aşağıdaki eşitsizliği sağlayan farklı x tam sayılarının toplamı nedir?

What is the sum of different integers x 's satisfying the following inequality?

$$\frac{x^2 - 8x}{\sqrt{2} - \sqrt{17}} < \sqrt{2} + \sqrt{17}$$

- A) -9 B) -10 C) -6 D) -15 E) -12

11. $x < y < z < 0 \Rightarrow$

$$\sqrt{x^2 - 2xy + y^2} - \sqrt[3]{y^3 - 3y^2z + 3yz^2 - z^3} - |z - x| = ?$$

- A) $2x$ B) $2y$ C) 0 D) $2z$ E) $2z - 2x$

$$\left. \begin{array}{l} 3y + 4z = 3 \\ x + 2y - z = 6 \\ -2x - 4y + 3z = 9 \end{array} \right\} \Rightarrow \frac{x}{y} + z = ?$$

- A) 12 B) 15 C) 18 D) 21 E) 24

$$\frac{\left(\frac{2}{9} - A\right) : \frac{17}{3}}{\left(1 - \frac{2}{3}\right) : \frac{1}{4}} = -\frac{1}{2} \Rightarrow A = ?$$

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

13. $s(A \cup B) = 16$, $s(A^c) + s(B^c) = 14$, $s(E) = 18$
 $\Rightarrow s(A \cap B) = ?$

Evransel küme / E is universal set $A^c = E - A$

- A) 5 B) 6 C) 7 D) 8 E) 9

14. $(g \circ f)(x) = 12x + 13$
 $g(x) = 4x + 5$ $\Rightarrow f(x) = ?$

A) $f(x) = 2x - 1$ B) $f(x) = 3x - 2$ C) $f(x) = 3x + 2$
 D) $f(x) = 2x + 1$ E) $f(x) = 4x + 5$

15. C çift tamsayılar kümesi olsun. $A = [-\frac{\sqrt{17}}{2}, \sqrt{63})$
 ve $B = [-\sqrt{10}, \sqrt{82})$ aralıklar olmak üzere
 $(A \cup B) \cap C$ kümesinin eleman sayısı kaçtır?

Let C be set of even integers. What is the number of elements of the set $(A \cup B) \cap C$, where $A = [-\frac{\sqrt{17}}{2}, \sqrt{63})$ and $B = [-\sqrt{10}, \sqrt{82})$ are intervals.

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

16. $x^2 + |3x - 22| + 4 = 0$

Denkleminin çözüm kümesi aşağıdakilerden hangisidir?

What is the set of solution of the above equation?

- A) $\{-6, 3\}$ B) $\{-3, 6\}$ C) \emptyset D) $\{-6\}$ E) $\{3\}$

17. $3f^{-1}(x) = f^{-1}(x-2)$, $f(6) = 1 \Rightarrow f(2) = ?$

f^{-1} : f nin ters fonksiyonu

f^{-1} : inverse function of f

- A) 0 B) 1 C) 2 D) 3 E) 5

19. $f(4 + \sqrt[3]{2x-5}) = 5 - 3x$, $g(4x^2 + 6x - 3) = x^2 + \frac{3}{2}x - 2$

$$\Rightarrow f(3) + g(13) = ?$$

- A) 8 B) 6 C) 5 D) -1 E) 1

18. $\binom{x}{2} = 3 - x \Rightarrow x = ?$, $C(n, r) = \binom{n}{r}$

- A) 0 B) 1 C) 2 D) 3 E) 4

20. 2030402 sayısının rakamları ile kaç farklı 7 basamaklı sayı yazılabılır?

How many different 7-digit numbers can be written with the digits of the number 2030402 ?

- A) 160 B) 200 C) 240 D) 280 E) 300

21. 8 kitabın 2'si Ahmet'e, 6'sı Ayşe'ye kaç farklı şekilde verilebilir?

How many different ways can be given 2 of 8 books to Ahmet and 6 of 8 books to Ayşe?

- A) 12 B) 14 C) 21 D) 28 E) 132

22. $\left(x - \frac{1}{x}\right)^8$ ifadesinin açılımındaki sabit terim aşağıdakilerden hangisidir?

Which of the following is the constant term in the expansion?

- A) 40 B) 70 C) 60 D) 80 E) 120

23. İki zar birlikte havaya atılıyor. Üst yüzlere gelen sayıların toplamının 8 olma olasılığı kaçtır?

The two dice are thrown into the air together. What is the probability that the sum of the numbers on the top faces is 8?

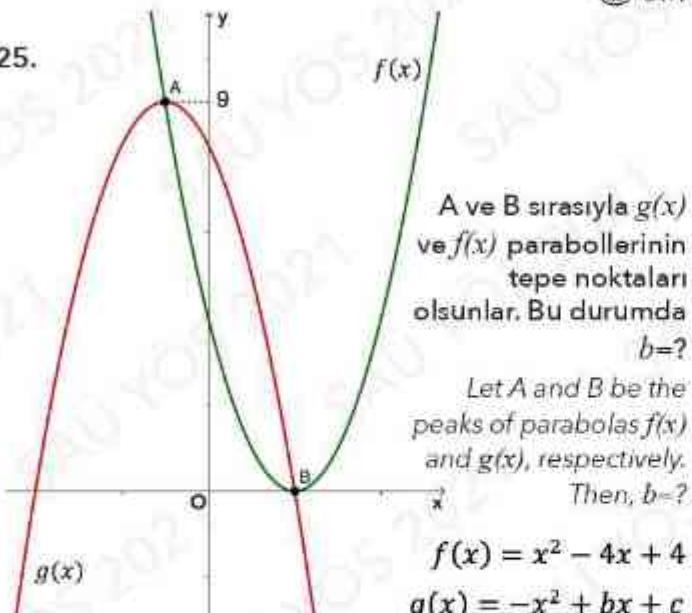
- A) $\frac{1}{6}$ B) $\frac{2}{9}$ C) $\frac{5}{36}$ D) $\frac{7}{36}$ E) $\frac{1}{3}$

24. 1 ile 100 arasından seçilen iki tam sayıdan birinin diğerinin üç katı olma olasılığı nedir?

What is the probability that one of the two integers chosen from 1 to 100 is three times the other?

- A) $\frac{1}{150}$ B) $\frac{1}{99}$ C) $\frac{1}{100}$ D) $\frac{1}{120}$ E) $\frac{1}{33}$

25.

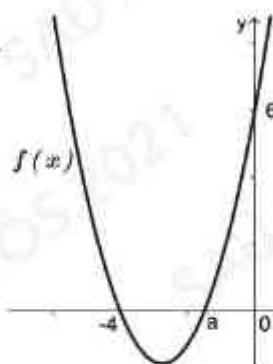


- A) -8 B) -2 C) 0 D) 2 E) 8

26. $(x+1)P(x) = x^3 + 4x^2 + 2x + n \rightarrow P(x) = ?$

- A) $x^2 + 3x - 1$ B) $x^2 - 2x + 3$ C) $x^2 + 2x - 1$
 D) $x^2 + 2x + 2$ E) $x^2 - 3x + 1$

27.



Şekildeki parabolün grafiğine göre, $f(a-4) = ?$

According to the graph of parabola, $f(a-4) = ?$

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

28. $i^2 = -1$ olmak üzere $z=3i$ karmaşık sayısının kutupsal gösterimi hangisidir?

What is the polar form of the complex number $z=3i$, where $i^2 = -1$?

- A) $\cos\frac{\pi}{2} + i\sin\frac{\pi}{2}$ B) $2(\cos\frac{\pi}{2} + i\sin\frac{\pi}{2})$ C) $\cos\pi + i\sin\pi$
 D) $3(\cos\pi + i\sin\pi)$ E) $3(\cos\frac{\pi}{2} + i\sin\frac{\pi}{2})$

29. $4^{x+1} - 2^{x+1} - 6 = 0 \Rightarrow x = ?$

- A) $\log_3 \frac{3}{2}$
 B) $\frac{\ln 2}{\ln 3}$
 C) $\frac{\ln 2 - \ln 3}{\ln 3}$
 D) $\frac{\ln 3 - \ln 2}{\ln 2}$
 E) $\log_2 \frac{2}{3}$

31. $\frac{\cot 45 + \tan 30}{1 - \tan 45 \cdot \sec 60} = ?$

- A) $\frac{-1}{\sqrt{3}}$
 B) $\frac{1}{\sqrt{3}}$
 C) $-(\frac{1+\sqrt{3}}{2})$
 D) $\frac{1+\sqrt{3}}{2}$
 E) $-(\frac{1+\sqrt{3}}{\sqrt{3}})$

30. $i^2 = -1, \sum_{k=1}^{2021} i^k = ?$

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

32. $\log_2 x + \log_{32} x = 12 \cdot \log_2 x \cdot \log_{32} x \Rightarrow x = ?$

- A) 2 B) $\sqrt{2}$ C) 4 D) 6 E) 8

33. $f(2x+3) = 3x^4 + 2x^3 - 5x^2 + 4x - 1 \Rightarrow f'(5) = ?$

- A) 6 B) 12 C) 5 D) 11 E) 8

35. $f(x) = x^3 - 6x + 2 \Rightarrow \lim_{h \rightarrow 0} \frac{f(2h+2) - f(2)}{h} = ?$

- A) 6 B) 10 C) 12 D) 16 E) 20

34. $x \in \left(\pi, \frac{3\pi}{2}\right), \frac{1 + \tan x}{3 + \tan x} = 2 \cot x \Rightarrow \sin^2 x - \cot x = ?$

- A) $\frac{27}{30}$ B) $\frac{37}{30}$ C) $\frac{17}{10}$ D) $\frac{27}{10}$ E) $\frac{17}{30}$

36. $\int_{-3}^3 |x^2 - 1| dx = ?$

- A) 0 B) 12 C) 14 D) $\frac{14}{3}$ E) $\frac{44}{3}$

37. $\lim_{x \rightarrow y} \frac{x\sqrt{x} - y\sqrt{y}}{y^2 - x^2} = ?$

- A) $\frac{-3}{4\sqrt{y}}$ B) $\frac{3}{2\sqrt{y}}$ C) $\frac{-1}{\sqrt{y}}$ D) $\frac{2}{\sqrt{y}}$ E) $\frac{-3}{\sqrt{y}}$

38. $\int (x+3)f(x)dx = \frac{x^4}{4} + 27x + c$

$$\Rightarrow f(0) + f'(0) = ?$$

- A) 9 B) 6 C) 3 D) -9 E) -6

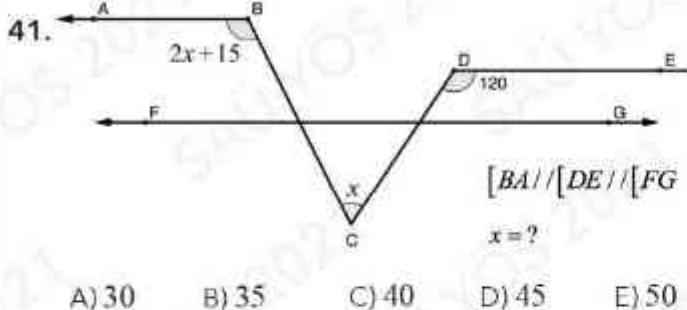
39. $f(x)$ 2. dereceden bir polinom ve
 $f(x) - f'(x) = 2x^2 + 3x + 4$ ise $f(1) = ?$

If $f(x)$ is a second order polynomial and
 $f(x) - f'(x) = 2x^2 + 3x + 4$ then $f(0) = ?$

- A) 21 B) 16 C) 14 D) 18 E) 20

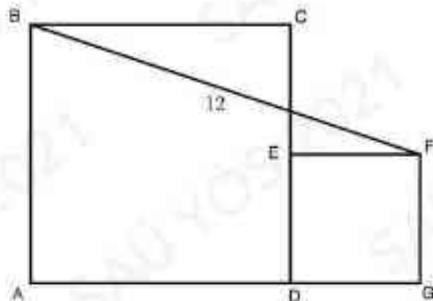
40. $\int_1^a \frac{x^2 - 1}{x^2} dx = \frac{4}{3} \Rightarrow a = ?$

- A) 3 B) 2 C) 1 D) 4 E) 10



- A) 30 B) 35 C) 40 D) 45 E) 50

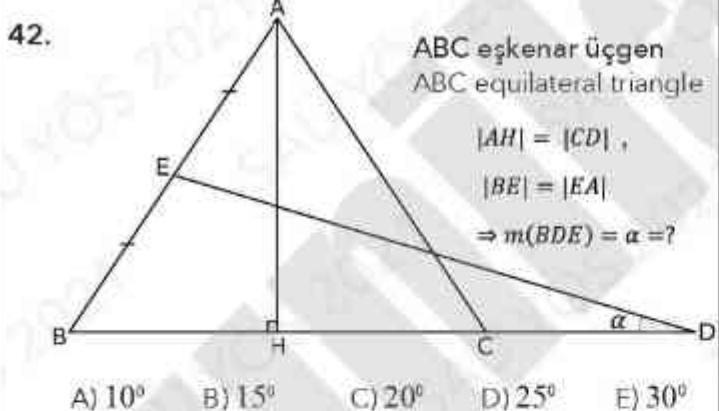
43.



$|BF| = 12\text{cm}'\text{dir. } ABCD \text{ ve } DEFG \text{ karelerinin alanlarının toplamı kaçtır?}$

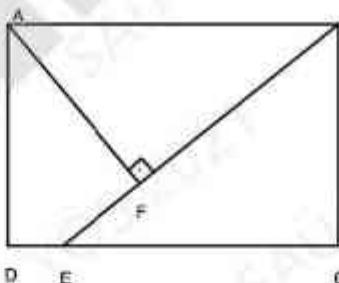
If $ABCD$ and $DEFG$ are squares and $|BF|=12\text{cm}$, then what is the sum of the areas of the squares $ABCD$ and $DEFG$

- A) 96 B) 36 C) 72 D) 108 E) 144



- A) 10° B) 15° C) 20° D) 25° E) 30°

44.

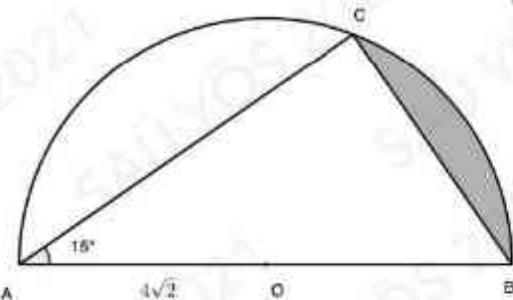


ABCD bir dikdörtgen.
ABCD is a rectangle.

$|EC| = 16$, $|BC| = 12$, $|EF| = 4$
 $A(ABCD) = ?$

- A) 204 B) 240 C) 180 D) 192 E) 216

45.

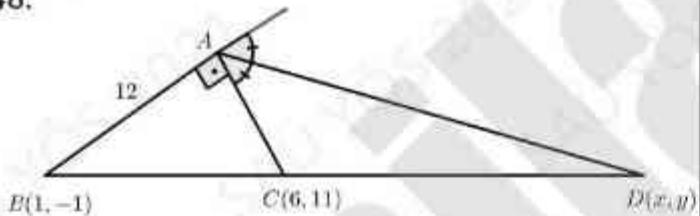


O noktası merkez ve $|AO| = 4\sqrt{2}$. Taralı bölgenin alanını bulunuz.

Point O is center and $|AO| = 4\sqrt{2}$. Find the area of shaded region.

- A) $\frac{8}{3}(\pi - 3)$ B) $8\pi - 3$ C) $\frac{8\pi}{3} - 3$
 D) $\frac{4\pi}{3} - 3$ E) $\frac{4}{3}(\pi - 3)$

46.

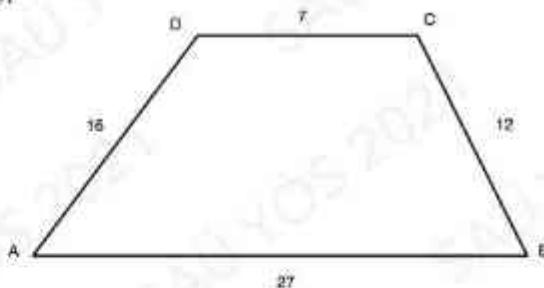


ABC analitik düzlemede bir dik üçgen $[AD]$ dış açıortay olduğuna göre $y - x = ?$

ABC is the right triangle in cartesian coordinates and $[AD]$ is an outer bisector. Find the value of $y - x = ?$

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

47.

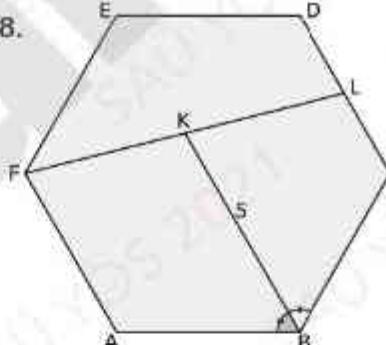


ABCD bir yamuk, $|AB|=27$ cm, $|AD|=16$ cm, $|DC|=7$ cm, $|BC|=12$ cm olduğuna göre $A(ABCD)$ kaç cm^2 dir?

Let ABCD is a trapezoid and $|AB|=27$ cm, $|AD|=16$ cm, $|DC|=7$ cm, $|BC|=12$ cm, then $A(ABCD)=?$

- A) 96 B) $\frac{288}{5}$ C) $\frac{288}{7}$ D) $\frac{816}{3}$ E) $\frac{816}{5}$

48.



ABCDEF bir düzgün altıgen

ABCDEF is a regular hexagon

$$m(ABK) = m(KBL)$$

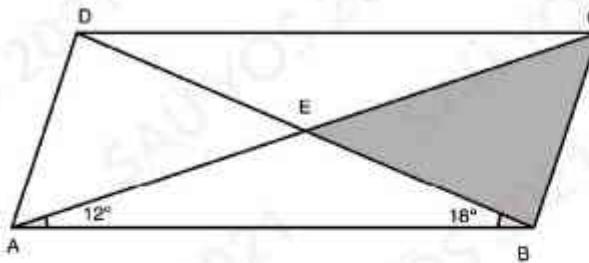
$$|DL| = |LC|$$

$$|BK| = 5$$

$$|FL| = ?$$

- A) 5 B) $2\sqrt{6}$ C) $2\sqrt{13}$ D) $13\sqrt{2}$ E) $6\sqrt{2}$

49.



ABCD paralelkenardır.

ABCD is a parallelogram.

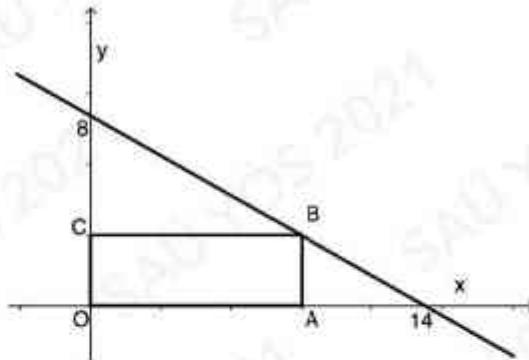
$$m(EAB) = 12^\circ, m(ABE) = 18^\circ$$

$$|AC| = 8, |BD| = 6$$

$$A(EBC) = ?$$

- A) 12 B) 6 C) 9 D) 3 E) 18

50.

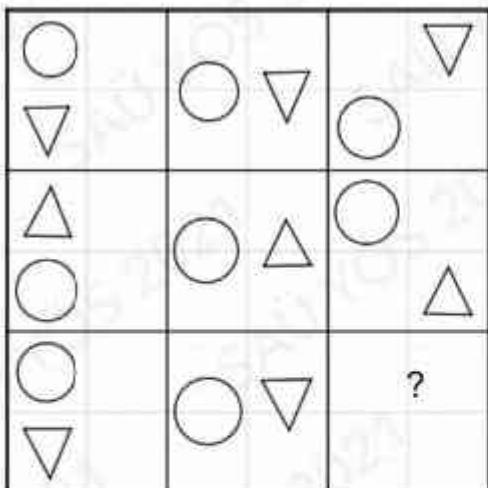


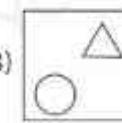
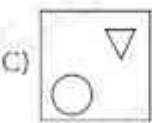
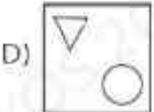
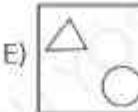
OABC dikdörtgeninin çevresi 22 cm olduğuna göre
B noktasının apsisini bulunuz.

If perimeter of the rectangle OABC is 22 cm then find
abscissa of the point B.

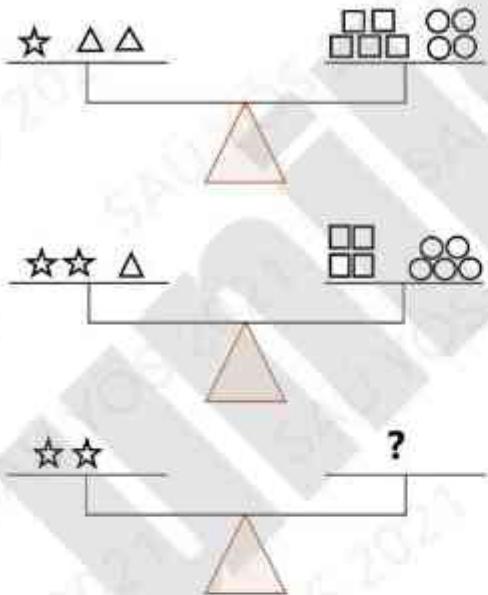
- A) 12 B) 8 C) 10 D) 11 E) 7

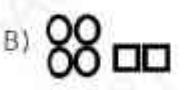
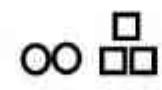
51.



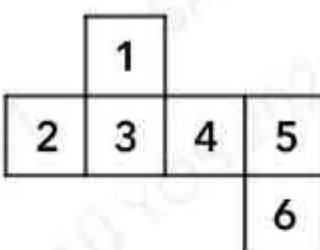
- A)  B)  C) 
- D)  E) 

52.



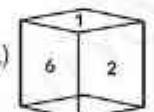
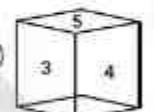
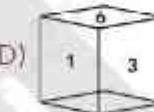
- A)  B)  C) 
- D)  E) 

53.

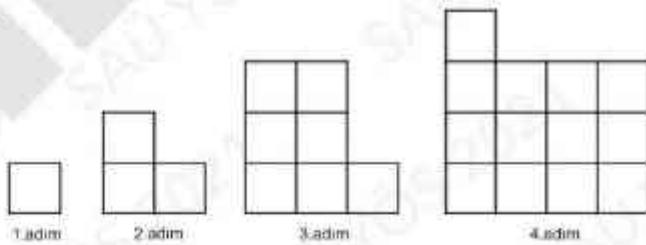


Yukarıda açık şekli verilen küp aşağıdakilerden hangisidir?

Which of the following is the open shape of cube given above?

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

54.

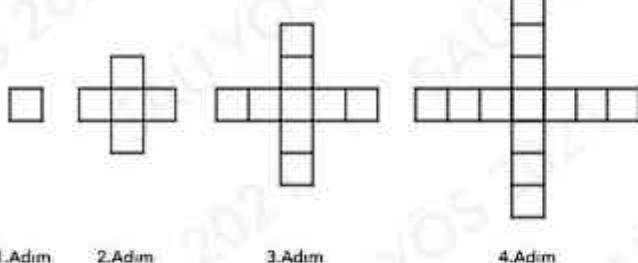


Yukarıdaki şekilde her bir küçük kare bir birim kare olmak üzere 15. Adımda kaç tane bir birimlik kare vardır?

How many unit squares are there in Step 15 according to the above figure where each little square is a unit?

- A) 122 B) 155 C) 211 D) 241 E) 273

55.

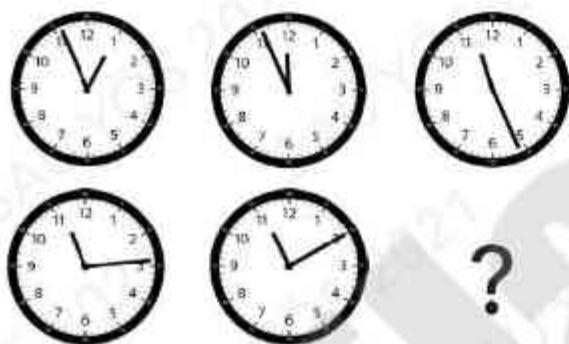


Yukandaki örüntüye göre 80. adımda kaç kare vardır?

How many squares are there in step 80 according to the above pattern?

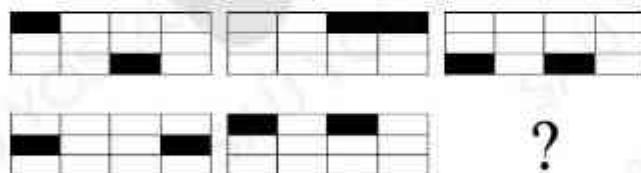
- A) 317 B) 313 C) 311 D) 308 E) 301

56.



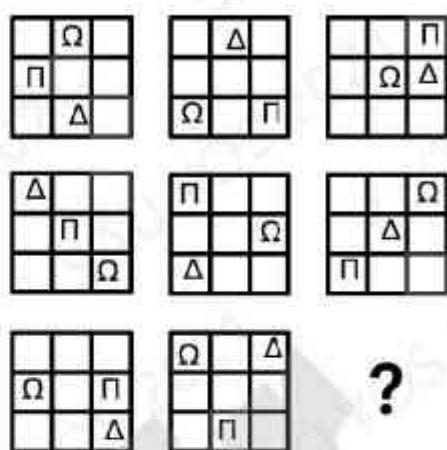
- A) B) C)
 D) E)

57.



- A) B) C)
 D) E)

58.



Yukarıdaki şekilde ? yerine aşağıdakilerden hangisi gelmelidir?

Which of the following figure must stand instead of ? given above?

- A) B) C)
 D) E)

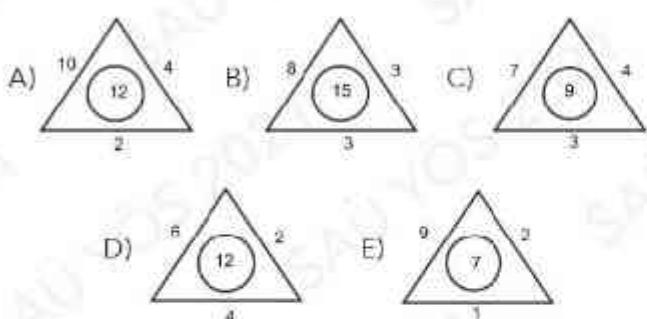
59. Birbirine eş 125 küçük küpten oluşan büyük bir küpün bütün yüzeyleri boyanıyor. Bu durumda boyasız kaç küp bulunur?

All surfaces of a large cube made up of 125 identical small cubes are painted. In this case, how many unpainted cubes are there?

- A) 9 B) 27 C) 18 D) 36 E) 64

60. Aşağıdakilerden hangisi farklıdır?

Which of the following is different?



61.

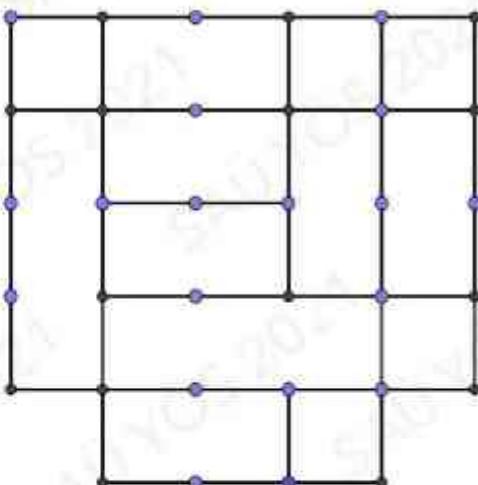
40	4	11	7
35	3	10	8
30	2	11	9
25	7	10	?

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

62. 17, 33, 64, 124, 240, ?

- A) 464 B) 442 C) 398 D) 468 E) 480

63.



Yukarıdaki resimde kaç kare vardır?

How many squares are there in the picture above?

- A) 9 B) 10 C) 11 D) 12 E) 15

64. $\text{◆} + \text{◆} + \text{◆} = 18$

$$\text{香蕉} + \text{香蕉} + \text{◆} = 10$$

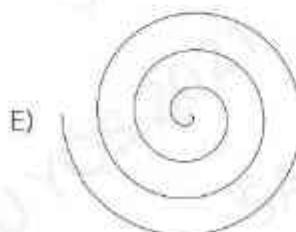
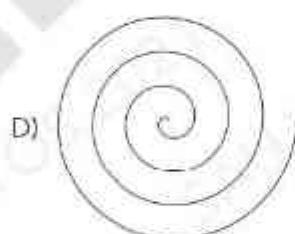
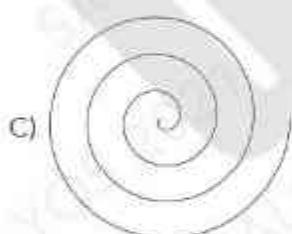
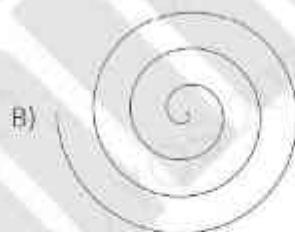
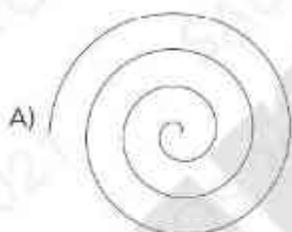
$$\text{香蕉} + \text{香蕉} + \text{⌚} = 5$$

$$\text{⌚} + \text{◆} + \text{香蕉} = ?$$

- A) 7 B) 8 C) 9 D) 11 E) 13

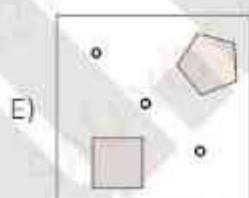
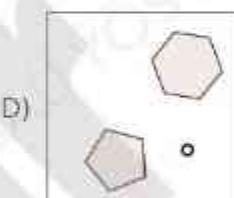
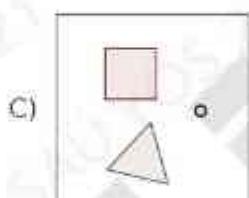
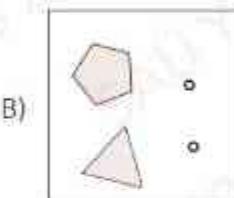
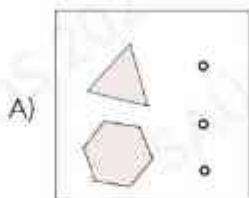
65. Aşağıdakilerden hangisi farklıdır?

Which of the following is different?

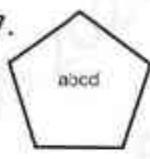
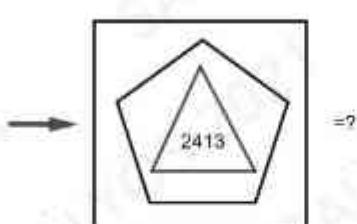


66. Aşağıdakilerden hangisi farklıdır?

Which of the following is different?



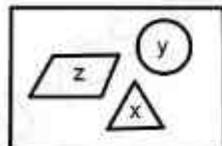
67.

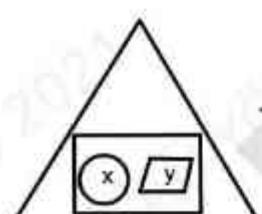

 → dabc


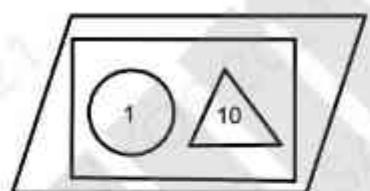
 → cabd

- A) 3241 B) 3214 C) 4312 D) 2431 E) 4132

68.


 → $\log x + 10^y + 3z$


 → $\log(10^x + 3y)$


 → ?

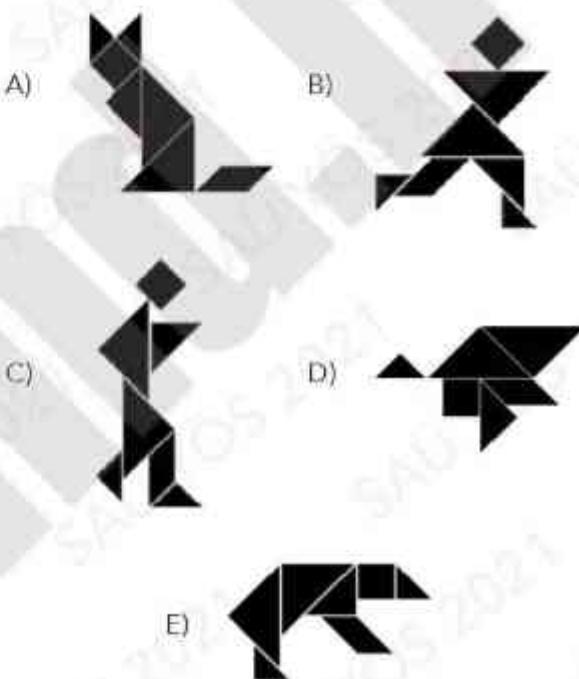
- A) 3 B) 33 C) 31 D) 12 E) 39

69.

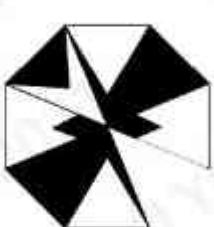


Yukarıdaki şekildeki tüm kesik parçalarla aşağıdaki figürlerden hangisi elde edilemez?

Which of the following figures can not be obtained with the all pieces in the above figure?



70.



Yandaki şeitin eksik parçası aşağıdakilerden hangisidir?

Which of the following is the missing part in the figure?

