

GALATA TR-YÖS-3

Galata TR-YÖS
denemesinin
2.takımı

Sınav Süresi
100 DK

@galatayosegitim

SINAV İÇERİĞİ

Exam content

Sayısal Yetenek 40 Soru
Numerical Ability

Temel Matematik 40 Soru
Basic Mathematics

ADINIZ VE SOYADINIZ
Your Name And Surname

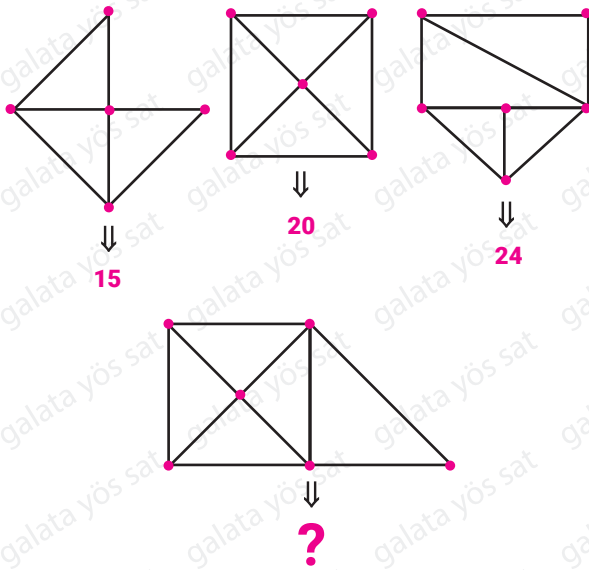
SINIF
Class



VIDEO
ÇÖZÜMÜ

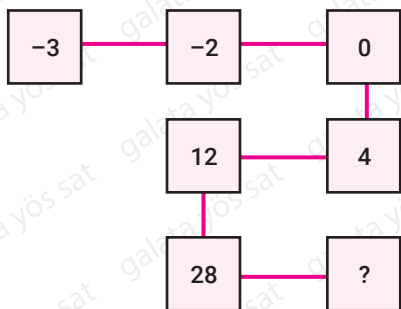
IQ

1.



- A) 35 B) 30 C) 27 D) 25 E) 18

2.



- A) 40 B) 48 C) 56 D) 60 E) 64

3.

$$x_1, x_2, x_3, x_4, \dots, x_{99}, x_{100}$$

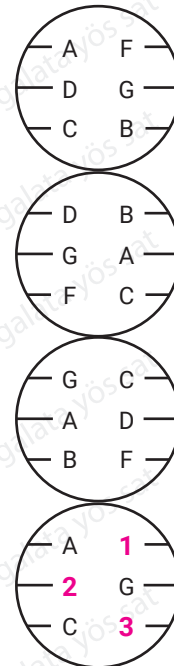
$$k = 1, 2, 3, 4, \dots, 96$$

$$x_k + x_{k+1} + x_{k+2} + x_{k+3} = x_{k+1} + x_{k+2} + x_{k+3} + x_{k+4}$$

$$\left. \begin{array}{l} x_{25} = 8 \\ x_{67} = 10 \\ x_{94} = 5 \end{array} \right\} x_{10} + x_{47} + x_{61} + x_{66} = ?$$

- A) 15 B) 20 C) 23 D) 25 E) 28

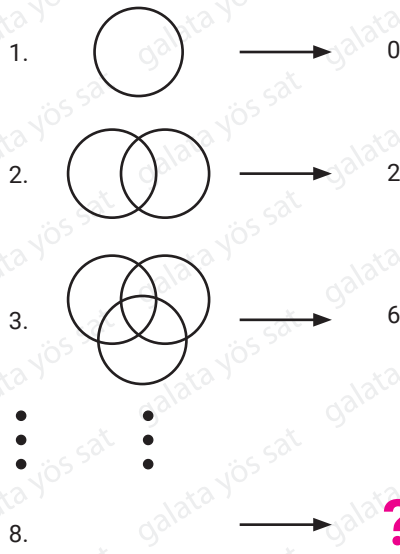
4.



$\Rightarrow 1, 2, 3 = ?, ?, ?$

- A) D, F, B B) B, D, F C) D, B, F
D) F, D, B E) F, B, D

5.



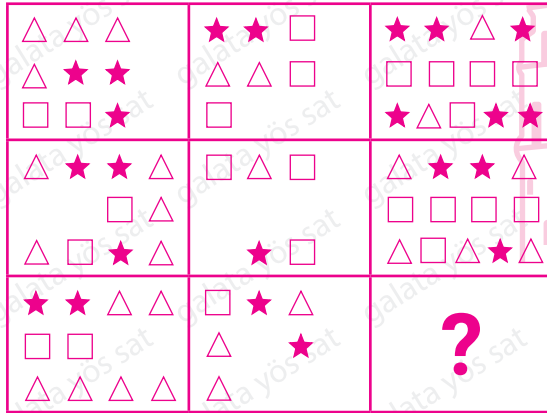
- A) 56 B) 42 C) 30 D) 20 E) 12

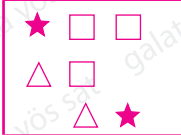
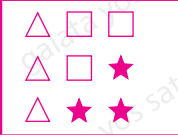



7.

2, 3	1, 7	8, 4	3, 1	9, 9	1, 6
4	2	7	?	7	

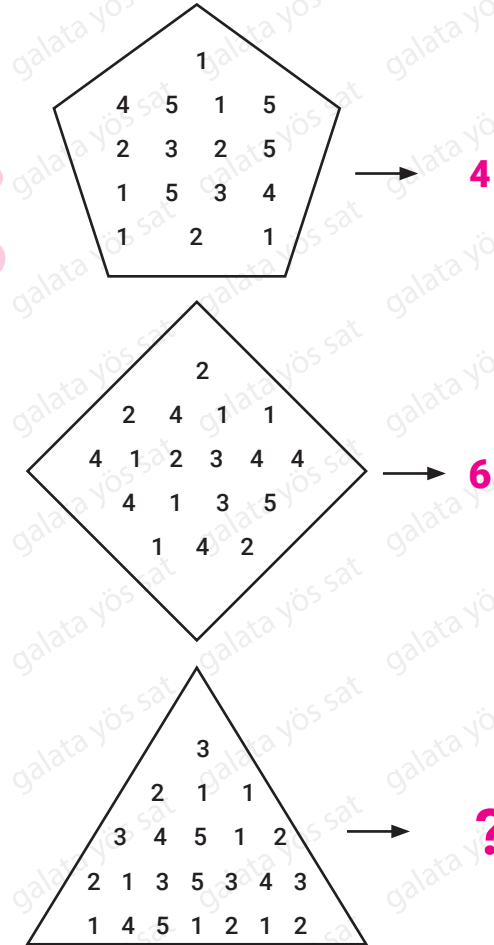
- A) 1 B) 2 C) 3 D) 4 E) 5

6.



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

8.



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

9.

$$\boxed{3} \star \triangle 2 \star \hexagon{1} = 136$$

$$\pentagon{1} \star \boxed{2} \star \triangle 3 = 126$$

$$\diamond 3 \star \pentagon{4} \star \hexagon{2} = ?$$

- A) 173 B) 167 C) 159 D) 151 E) 146

11.

	8	5	12	9
5	3	-	7	4
12	-	7	b	1
6	4	1	8	c
11	9	a	3	-

a = ?

b = ?

c = ?

- A) $\begin{matrix} 6 \\ 4 \\ 5 \end{matrix}$ B) $\begin{matrix} 5 \\ 3 \\ - \end{matrix}$ C) $\begin{matrix} 6 \\ - \\ 4 \end{matrix}$ D) $\begin{matrix} 2 \\ 3 \\ 1 \end{matrix}$ E) $\begin{matrix} - \\ 4 \\ 5 \end{matrix}$

10.

$$\diamond + \square + \triangle + \square = ?$$

- A) B) C) D) E)

12.

21	33	41	34	?
60	48	55	95	?

- A) $\begin{matrix} 42 \\ 64 \end{matrix}$ B) $\begin{matrix} 13 \\ 26 \end{matrix}$ C) $\begin{matrix} 47 \\ 99 \end{matrix}$ D) $\begin{matrix} 53 \\ 91 \end{matrix}$ E) $\begin{matrix} 15 \\ 77 \end{matrix}$

13.

2	4	8	14	22	...	X
1	2	3	4	5	...	n.

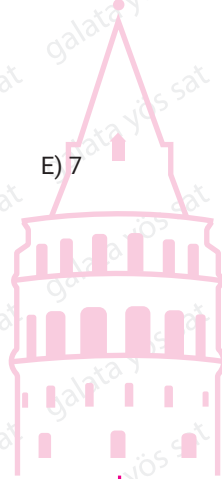
X = ?

- A) $n^2 - 2n$ B) $n \cdot (n - 1)$ C) $(n - 1) \cdot (n + 1)$
D) $n^2 - n + 2$ E) $n^2 + n - 2$

14.

35791113151719?

- A) 1 B) 2 C) 3 D) 5 E) 7



15.

	c	3	1
2		4	b
3	4		d
a	3	2	

a + b + c + d = ?

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

16.



→ 2



→ 15



→ 245



→ ?

- A) 68 B) 76 C) 88 D) 92 E) 100

17.

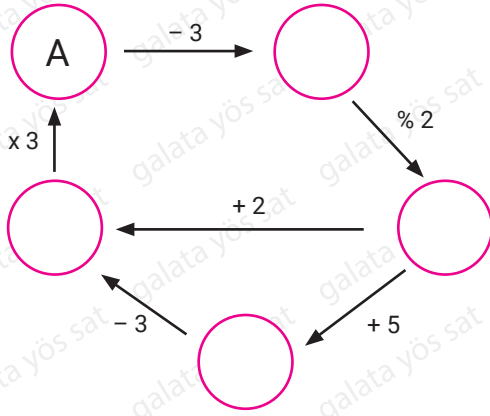
$$\begin{array}{r} x \\ K \\ K \\ \hline L \ M \end{array}$$

$K \neq L \neq M$

$\Rightarrow \max(K + L + M) = ?$

- A) 21 B) 20 C) 18 D) 16 E) 12

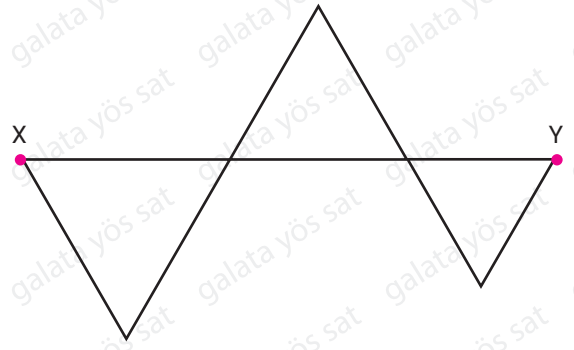
18.



A = ?

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

20.

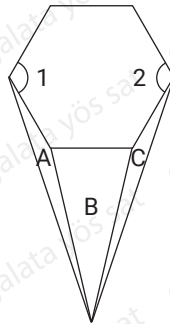
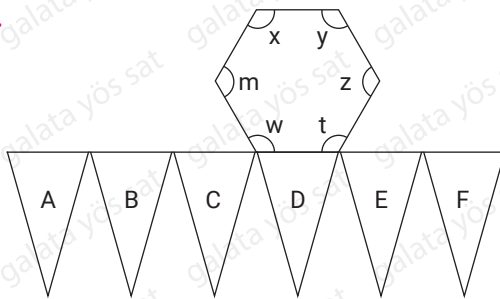


Yukarıda verilen şekil üç farklı eşkenar üçgenden oluşmuştur. Bu eşkenar üçgenlerin çevrelerinin uzunlukları toplamı 51 cm'dir.

Buna göre, |XY| uzunluğu kaç cm'dir?

- A) 13 B) 15 C) 17 D) 19 E) 21

19.

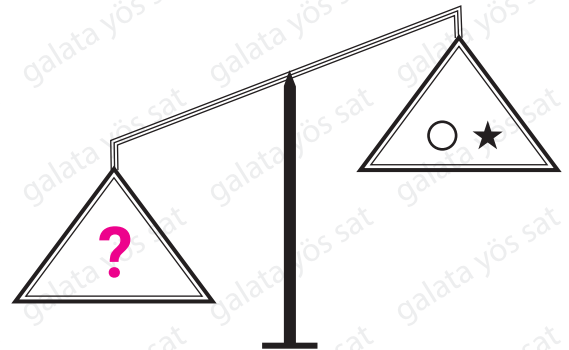


1, 2 = ?, ?

- A) x, t B) m, y C) w, x D) z, m E) y, w

21.

★ = ○ ♥
■ ★ = ○ ○ ○
♥ ♥ = ■



- A) ♥ ♥ ○ B) ■ ♥ C) ■ ■ ■
D) ■ ♥ ♥ E) ♥ ○ ■

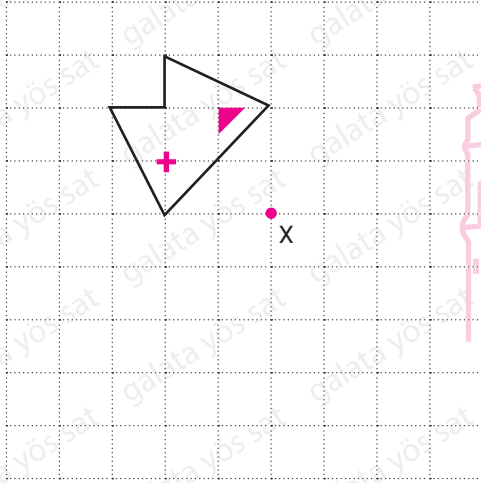
22.

62			46
		K	
		59	
	L		
77			M

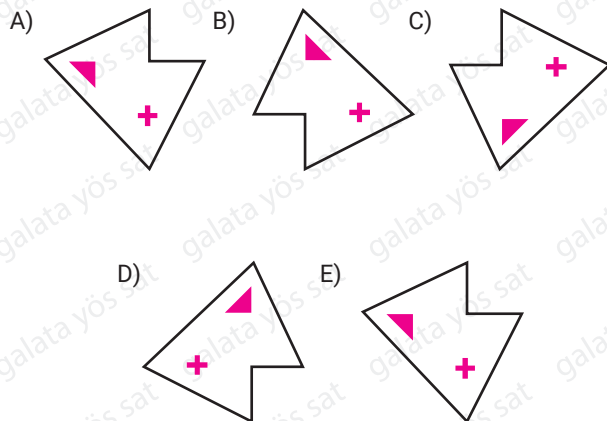
$$K + L - M = ?$$

- A) 57 B) 70 C) 114 D) 127 E) 224

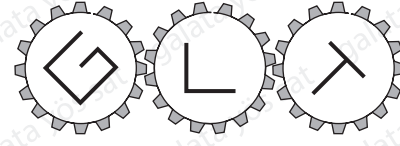
23.



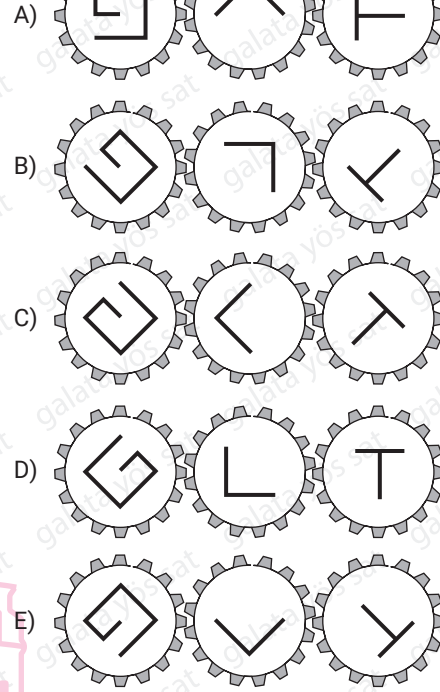
Yukarıdaki şeklin X noktasına göre simetriği aşağıdaki kilerden hangisidir?



24.



135°



25.

$$S^2 \# 9 = 6 \cdot S + 3$$

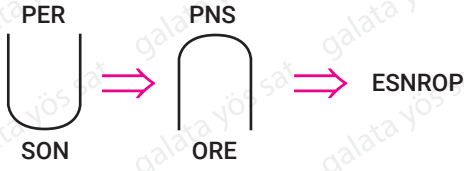
$$16 \# 15 = 45$$

$$49 \# 6 = 30$$

$$25 \# 21 = ?$$

- A) 81 B) 77 C) 65 D) 61 E) 58

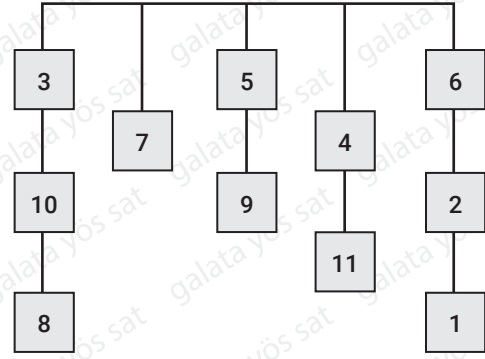
26.



? ⇒ ? ⇒ 8ZR5U9

- A) 958 9RZ ZUR U85
B) 589 8UZ RUZ R59
C) 985 9RZ ZUR U58
D) RZU 58U 589 9RZ
E) ZUR 9RZ 985 U58

28.



7 # 4 = 22

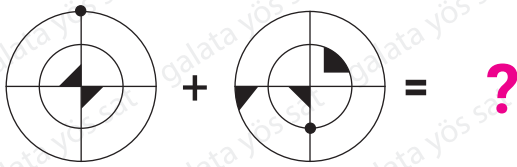
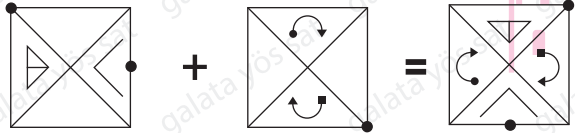
3 # 2 = 24

9 # 10 = 27

6 # 5 = ?

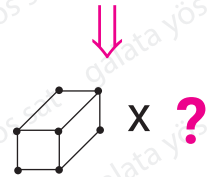
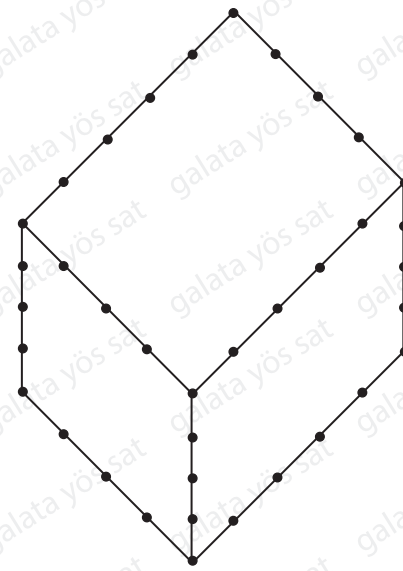
- A) 13 B) 16 C) 19 D) 21 E) 23

27.



- A) B) C) D) E)

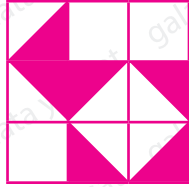
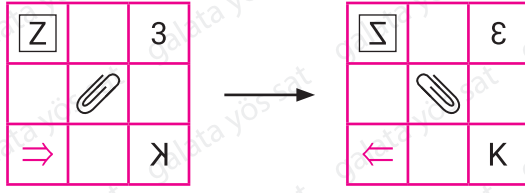
29.



Şekilde kaç tane birim küp vardır?

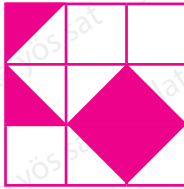
- A) 80 B) 81 C) 82 D) 83 E) 84

30.

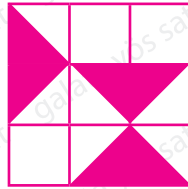


?

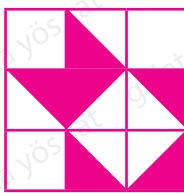
A)



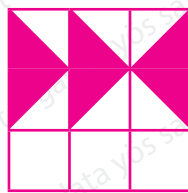
B)



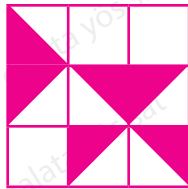
C)



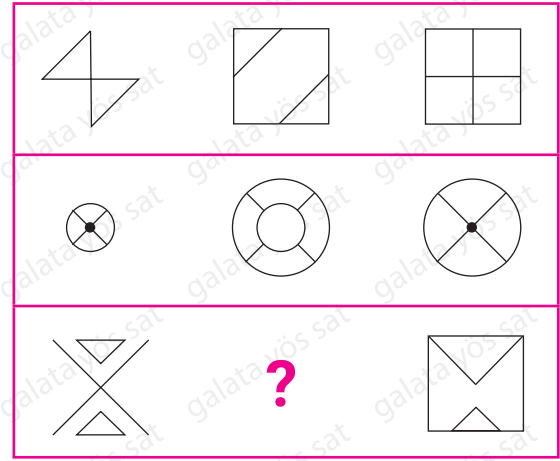
D)



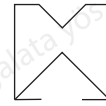
E)



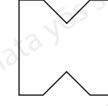
32.



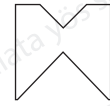
A)



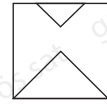
B)



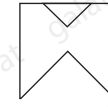
C)



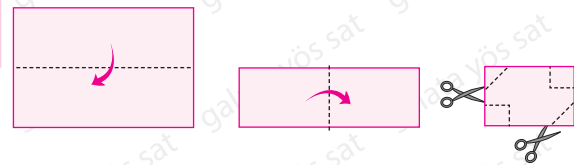
D)



E)



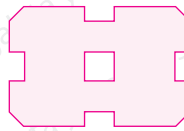
33.



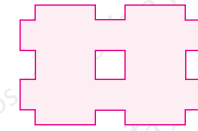
Yukarıdaki şekil ok yönünde katlanıp kesiliyor.

Tekrar açıldığında aşağıdakilerden hangisi gibi olur?

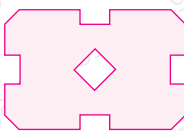
A)



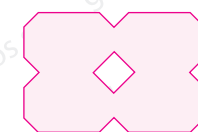
B)



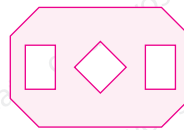
C)



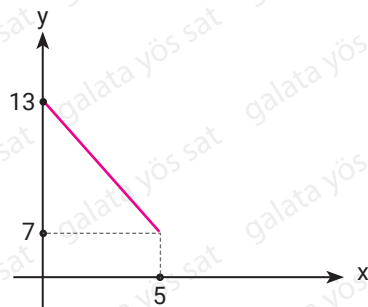
D)



E)



31.



$x = -25$

$y = ?$

A) -24

B) -8

C) 12

D) 28

E) 43

34.

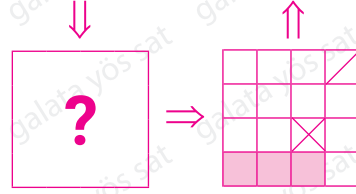
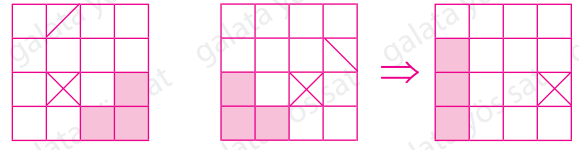
+	a^2	b^2
a^2		
b^2	121	

X	a	b
a		24
b		

$a + b = ?$

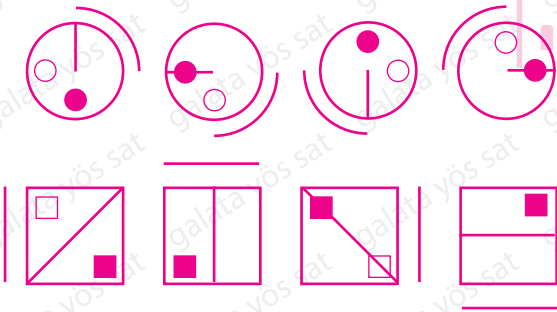
- A) 10 B) 11 C) 12 D) 13 E) 14

36.



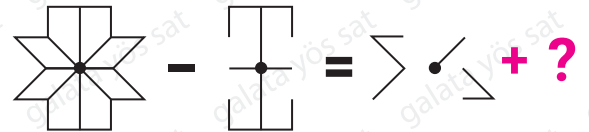
- A) B) C) D) E)

35.



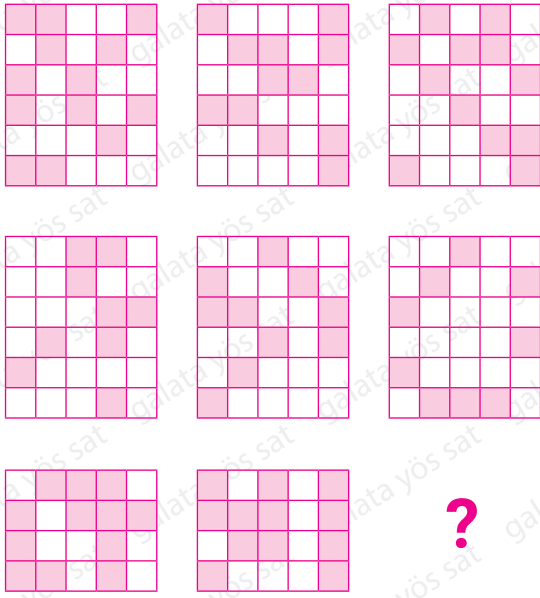
- A) B) C) D) E)

37.

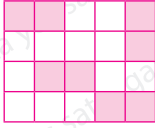


- A) B) C) D) E)

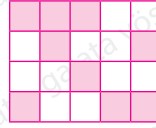
38.



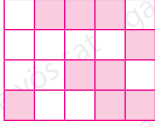
A)



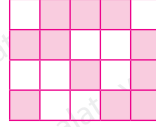
B)



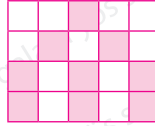
C)



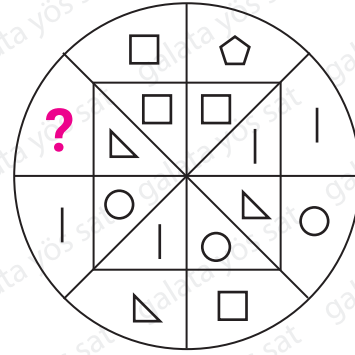
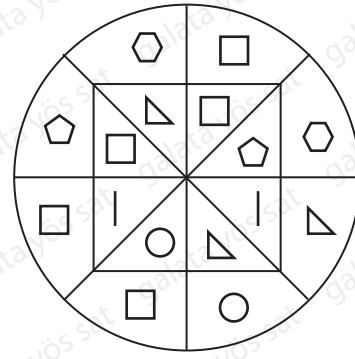
D)



E)



40.



A) |

B) △

C) □

D) ⬠

E) ⬡

39. Aşağıdakilerden hangisi diğerlerinden farklıdır?

A)



B)



C)



D)



E)



IQ testi soruları bitti.
Matematik ve Geometri testine geçiniz.

IQ test questions are over.
Pass the math and geometry test.

انتهت أسئلة اختبار الذكاء.

خذ اختبار الرياضيات والهندسة.



MATEMATİK

1. $\frac{\left(\frac{1}{4}\right)^{-1} : \left(\frac{1}{4}\right)^3}{4^4}$

işleminin sonucu kaçtır?

A) $\frac{1}{4}$

B) 1

D) 8

E) 16

C) 4

2. $a + \frac{1}{b + \frac{1}{c}} = \frac{11}{3}$

olduğuna göre $a + b + c$ toplamı kaçtır?

A) 3

B) 4

D) 6

E) 7

C) 5

3. $\frac{1,5}{0,5} + \frac{1,2}{0,4} - \frac{3,2}{1,6} = ?$

A) 6

B) 5

D) 3

E) 2

C) 4

4. n bir tam sayı,

- $a^{2n+1} \cdot b + a \cdot b^3 > 0$
- $\frac{a^{4n} \cdot b}{c} < a \cdot b^2$
- $b^{4n+2} \cdot c^{2n-1} < 0$

olduğuna göre, a, b, c sayılarının işaretleri sırasıyla aşağıdakilerden hangisidir?

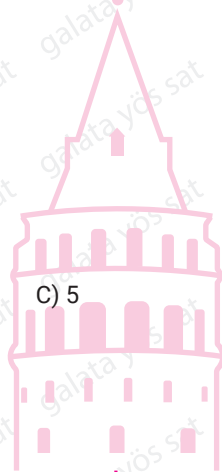
A) -, +, -

B) +, +, -

C) -, +, +

D) -, -, +

E) +, -, +



5. x bir rakam,

- $A = 16 - 2x$
- $B = 2x + 2$ olmak üzere,

$\frac{B}{A}$ bileşik kesir olduğuna göre, x kaç farklı değer alır?

A) 9

B) 8

C) 7

D) 6

E) 5

6. A ve $x \in \mathbb{Z}^+$

$$\begin{array}{r} \text{A} \overline{) x^2} \\ \underline{-} \\ 36 \end{array}$$

Yukarıdaki bölme işleminde A'nın alabileceği en küçük değer kaçtır?

- A) 483 B) 496 C) 506
D) 526 E) 536

7. $\bullet 2k + 1$ ve
 $\bullet 3k - 2$

ardışık tamsayılar olduğuna göre, k'nın alabileceği değerler toplamı kaçtır?

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

8. $\frac{(n-2)! + (17-n)!}{n^2 - 25} \in \mathbb{R}$

olduğuna göre, n kaç farklı değer alabilir?

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

9. $0! + 1! + 2! + 3! + \dots + 100!$

sayısının 24 ile bölümünden kalan kaçtır?

- A) 10 B) 12 C) 15
D) 18 E) 21

10. x bir tamsayı ve
y bir doğal sayı

$$y \cdot x = 4x + 18 + 3y$$

olduğuna göre, x kaç farklı değer alabilir?

- A) 16 B) 12 C) 11
D) 10 E) 8



11. AB, BB ve BA iki basamaklı birer sayıdır.

$$AB + BB + BA = 253$$

olduğuna göre, AB'nin alabileceği en büyük değer kaçtır?

- A) 98 B) 99 C) 96
D) 95 E) 97

12. $(x^2 - 4y^2) : x - 2y = 3 - 3y - \frac{4y^2}{x}$
 $\Rightarrow x + y = ?$

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

13. $M = x^4 + x^3 - 2x^2$
 $N = x^3 - 2x^2 + x$
olduğuna göre,

$$\frac{EKOK(M, N)}{EBOB(M, N)} = ?$$

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

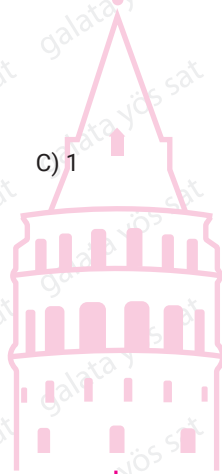
14. $n + 1$ basamaklı 300... sayısının tam bölen sayısı 100 olduğuna göre, n değeri kaçtır?

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

15. $y = ||7 - x| - 5|$

y'nin en küçük değeri için x'in alabileceği değerler toplamı kaçtır?

- A) 11 B) 12 C) 13
D) 14 E) 15



16. $\frac{1}{x} < \frac{1}{y} < 0$ olmak üzere,

$$|x - y| - |x + y|$$

ifadesinin eđiti ařağıdakilerden hangisidir?

A) $-2y$

B) $-2x$

C) $2y$

D) $2x$

E) $x - y$

19. $\left(\frac{6}{9}\right)^{1-3x} < \left(\frac{9}{4}\right)^{x+3}$

eřitsizlięini saęlayan ka tane x doęal sayısı vardır?

A) 10

B) 9

C) 8

D) 7

E) 6

17. $\bullet 2^x = m,$

$\bullet 5^{-x} = n$

olduęuna gre, $(50)^x$ 'in m ve n trnden eđiti ařağıdakilerden hangisidir?

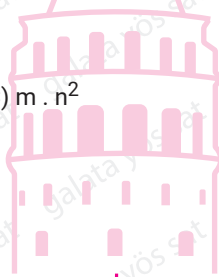
A) $m \cdot n$

B) $\frac{m}{n}$

D) $\frac{m}{n^2}$

E) $\frac{n}{m^2}$

C) $m \cdot n^2$



20. $\frac{\sqrt{5} + \frac{1}{\sqrt{5}}}{\sqrt{5} - \frac{1}{\sqrt{5}}}$

iřleminin sonucu katır?

A) 2

B) $\frac{3}{2}$

C) 1

D) -1

E) $-\frac{3}{2}$

18. $\bullet 7^{x+y} = 125$

$\bullet 7^{x-y} = 25$

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

A) 1

B) $\frac{2}{3}$

C) $\frac{3}{2}$

D) 3

E) 2

21. $\sqrt{2} \cdot (\sqrt{3} - \sqrt{2}) \cdot \sqrt{10 + 4\sqrt{6}}$

işleminin sonucu kaçtır?

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

22. $\sqrt[6]{z-8} + |x+y-z| + \sqrt{x^2-2xy+y^2} = 0$

$\Rightarrow x = ?$

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

23. $\frac{a}{b} - \frac{b}{a} - 2 = 0$

$\Rightarrow \frac{(2a \cdot b)^2}{2a^4 + 2b^4} + 1 = ?$

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

24. $x \neq 4$

$x^3 - 4 = 60$

$\Rightarrow x^2 + 4x + 3 = ?$

- A) -16 B) -15 C) -13
D) 12 E) 15

25. a, b ve c negatif tamsayılarıdır.

$5a = 2b$

$5b = 3c$

$\Rightarrow \max(a + b + c) = ?$

- A) -23 B) -46 C) -15
D) 15 E) 46



26. $\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = 3$

$a + 2c = 9$

$b + 3f = 5 - 2d$

olduğuna göre, e kaçtır?

A) 2

B) 5

C) 6

D) 8

E) 9

27. $\frac{f(x+1) + f(x)}{f(x+1)} = \frac{7}{2}$ ve

$f^{-1}(x)$ fonksiyonu $A(15, 4)$ noktasından geçmektedir.

Buna göre, $f(5)$ değeri kaçtır?

A) 5

B) 6

C) 7

D) 9

E) 10

28. • $\text{der}(p(x)) = 2$

• $p(x) = p(-x)$

• $p(2x - 2)$ polinomunun $x - 1$ ile bölümünden kalan 4

• $p(x + 2)$ 'nin sabit terimi 16

olduğuna göre, $p(x + 1)$ 'in sabit terimi kaçtır?

A) 6

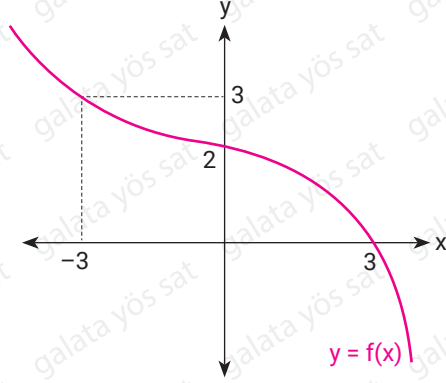
B) 7

C) 8

D) 9

E) 10

29. Şekilde $y = f(x)$ fonksiyonunun grafiği verilmiştir.



Buna göre, $(f \circ f)(-3)$ değeri kaçtır?

A) -3

B) 0

C) 2

D) 3

E) 5

30. $x^2 + (m - 5)x + 3 = 0$

denkleminin kökleri x_1 ve x_2 'dir.

$(x_1 - 2) \cdot (x_2 - 2) = 15$

olduğuna göre, m kaçtır?

A) 5

B) 6

C) 7

D) 8

E) 9

GEOMETRİ

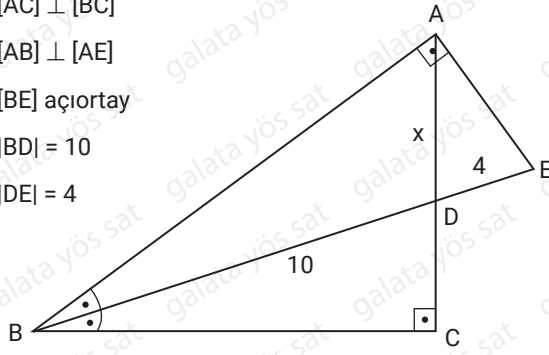
1. $[AC] \perp [BC]$

$[AB] \perp [AE]$

$[BE]$ açıortay

$|BD| = 10$

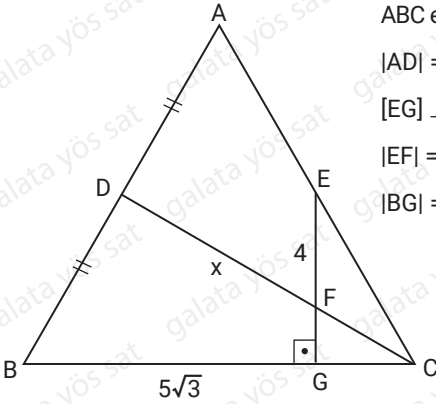
$|DE| = 4$



$|AD| = x = ?$

- A) $2\sqrt{2}$ B) $2\sqrt{5}$ C) $2\sqrt{6}$ D) $2\sqrt{7}$ E) 6

2.



ABC eşkenar üçgen

$|AD| = |DB|$

$[EG] \perp [BC]$

$|EF| = 4$

$|BG| = 5\sqrt{3}$

$|DF| = x = ?$

- A) $\frac{13}{2}$ B) $\frac{36}{5}$ C) 8 D) $\frac{17}{2}$ E) 9

3. $\vec{A} = (3m, 2)$

$\vec{B} = (m - 1, -3)$

$\vec{A} \perp \vec{B}$

$\sum m = ?$

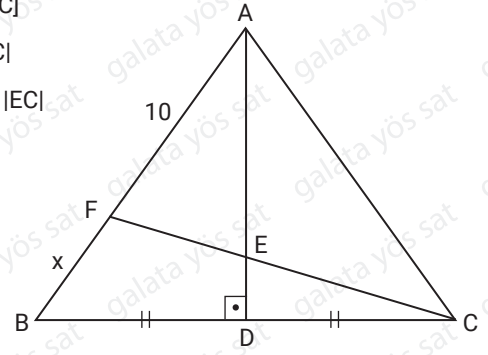
- A) 0 B) 1 C) $\frac{3}{2}$ D) 2 E) 3

4. $[AD] \perp [BC]$

$|BD| = |DC|$

$3|FE| = 2|EC|$

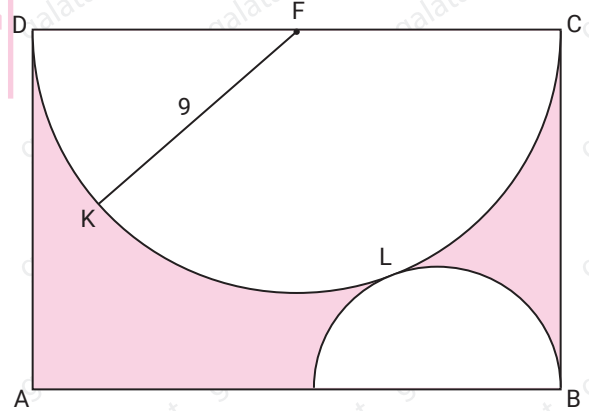
$|AF| = 10$



$|BF| = x = ?$

- A) 4 B) 5 C) $2\sqrt{7}$ D) $4\sqrt{2}$ E) 6

5.



F; yarım çemberin merkezi,

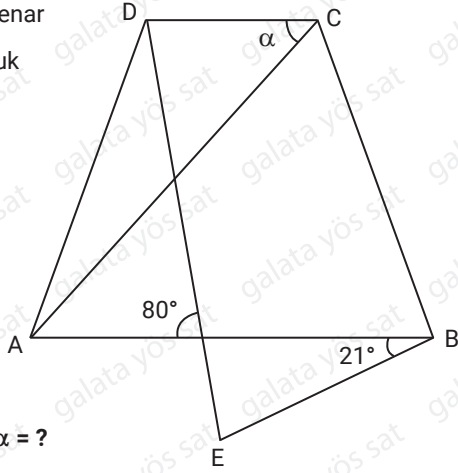
L; çemberlerin teğet noktası, ABCD dikdörtgen,

$|FK| = 9$ br, $A(ABCD) = 216$ br²

olduğuna göre, taralı alan nedir?

- A) $216 - \frac{29\pi}{3}$ B) $216 - \frac{97\pi}{2}$ C) $216 - \frac{37\pi}{2}$
D) $216 - 17\pi$ E) $216 - \frac{97\pi}{3}$

6. ABCD ikizkenar
yamuk
 $|AC| = |ED|$



$$m(\widehat{ACD}) = \alpha = ?$$

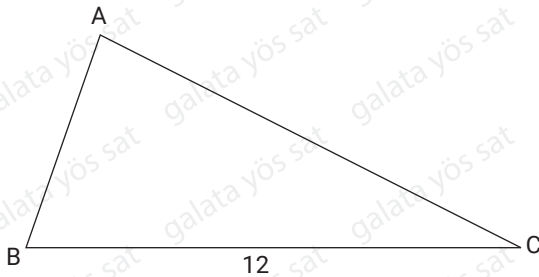
- A) 58 B) 60 C) 62 D) 64 E) 66

7.

$A(-5, 6)$
 $\xrightarrow{\quad} d_1$
 $\xrightarrow{\quad} d_2 : 7x + 14y - 8 = 0$
 $d_1 \parallel d_2 \Rightarrow d_1 = ?$

A) $x - 2y - 17 = 0$ B) $2x + y + 7 = 0$
C) $3x + 4y - 8 = 0$ D) $x + 2y - 7 = 0$
E) $x + 2y + 17 = 0$

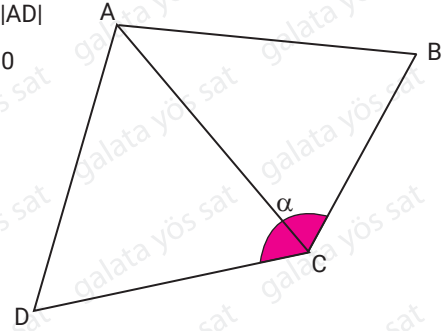
8.



$|AC| = 3|AB|$, $|BC| = 12$
 $\text{Çevre}(\widehat{ABC}) = \text{Ç} \in \mathbb{Z}$
 $\max \text{Ç} = ?$

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

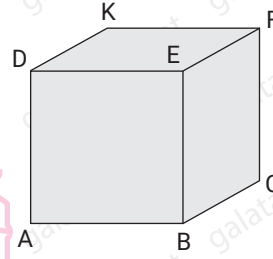
9. $|AB| = |AC| = |AD|$
 $m(\widehat{BAD}) = 100$



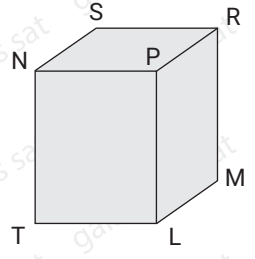
$$m(\widehat{BCD}) = \alpha = ?$$

- A) 100 B) 110 C) 115 D) 125 E) 130

10.



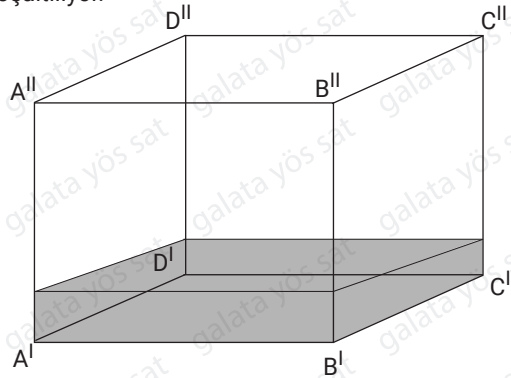
(Şekil I)



(Şekil II)

$|AB| = 3 \text{ br}$, $|LM| = 2 \text{ br}$

Yükseklikleri aynı olan küp ve kare prizma şeklindeki bardaklar su ile doludur. Her iki bardak Şekil III'deki dikdörtgen prizma şeklindeki sürahiye su kaybı olmadan boşaltılıyor.



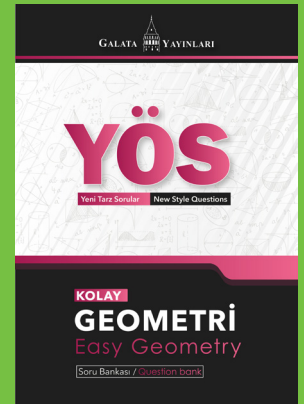
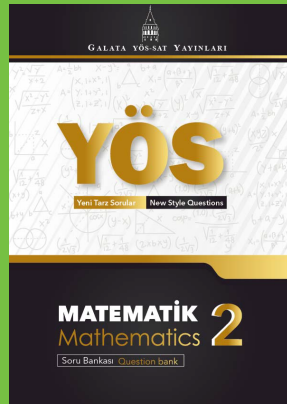
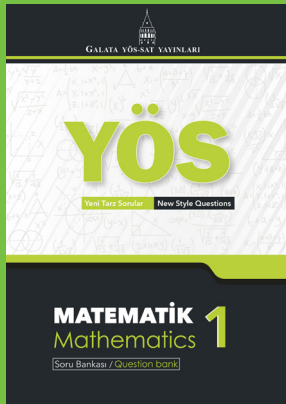
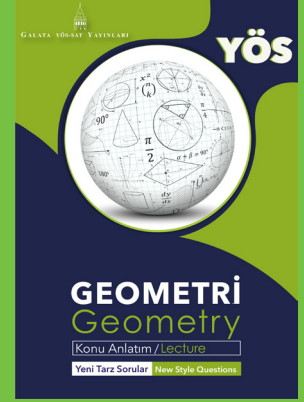
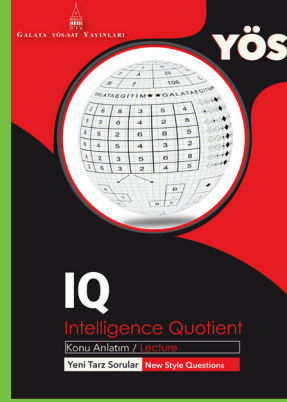
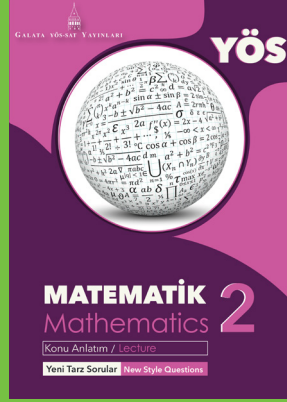
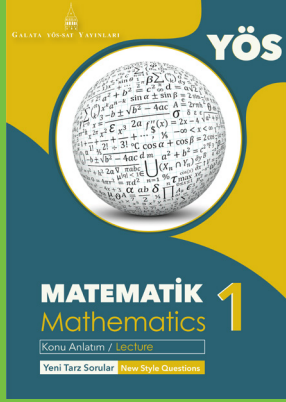
(Şekil III)

$|A'B'| = 13 \text{ br}$, $|B'C'| = 5 \text{ br}$

Bu durumda sürahideki suyun yüksekliği kaç br'dir?

- A) $\frac{1}{5}$ B) $\frac{3}{5}$ C) 3 D) 4 E) $\frac{13}{2}$

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