



1)

$$\frac{\frac{1}{5} - (\frac{1}{8} + \frac{1}{2})}{\frac{7}{10} - \frac{4}{2}} = ?$$

- A) $\frac{7}{5}$ B) -1 C) $\frac{11}{4}$ D) $\frac{17}{52}$ E) $\frac{19}{52}$

2)

$$\frac{7}{5} : (\frac{1}{3} - \frac{1}{10}) - 4 \cdot (\frac{7}{2} - \frac{1}{4}) = ?$$

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

3)

$$\frac{6^3 - 3^3 - 2^3 + 2}{2^3} = ?$$

- A) 0 B) $\frac{2}{4}$ C) 1 D) $\frac{181}{8}$ E) $\frac{183}{8}$

4)

$$\frac{15^3 \cdot 2^2 + 5 \cdot 6^3}{10 \cdot 9^3} = ?$$

- A) 1 B) $\frac{37}{19}$ C) 2 D) $\frac{37}{108}$ E) $\frac{43}{91}$

5)

$$\frac{5! \cdot 3! - 6!}{4! \cdot 2! - 3!} = ?$$

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

6)

$$\frac{4.54^x}{6^{x-1} \cdot 2} = \frac{648}{4^{x-1} \cdot 6^x}$$

x = ?

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

7)

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

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

8)

$$\frac{\sqrt{1000} \cdot \sqrt{30} - \sqrt{300}}{2\sqrt{3} \cdot 3\sqrt{3} \cdot 5\sqrt{3}} = ?$$

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

9)

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

- A) $a^2 - ab$ B) $a + 3b$ C) $ab - 2ab$
D) $2a + b^2$ E) $a^2 - b^2$

10)

$$x^3 - x^2 - x - 1 = (x^2 + 1)(x - 1) + nx + m$$

$$\rightarrow n^2 + m^2 = ?$$

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

11)

$$|7 - b| = 9$$

$$|c - 3| = a$$

$$|a + 15| = 16$$

$$a + b + c = ?$$

- A) 18 B) 20 C) 21 D) 23 E) 24

12)

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

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

- A)
- $\sqrt{2}$
- B)
- $2\sqrt{2}$
- C) 2 D) 4 E) 16

13)

$$-1 < x < 0 \rightarrow ? < ? < ?$$

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

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

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

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

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

14)

C tamsayı olduğuna göre,

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

$$c = \frac{a+b+1}{5} \Rightarrow a+b+3 = ?$$

- A) 25 B) 33 C) 35 D) 40 E) 47

15)

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

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

$$\rightarrow x.y = ?$$

- A) 40 B) 30 C) 24 D) 48 E) 50

16)

$$f(2^x) = \frac{3^x + 1}{2}$$

$$f(a) = 14$$

$$f\left(\frac{a}{16}\right) = ?$$

- A)
- $\frac{2}{3}$
- B)
- $\frac{4}{9}$
- C) 2 D)
- $\frac{1}{2}$
- E)
- $\frac{3}{2}$

17)

$$x.y = -6$$

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

$$x + y = ?$$

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



18)

$$2f(x) + f(2-x) + x^2 = 8$$

$$f(0) + f(2) = ?$$

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

19)

$\times$	M	M		N	N		NMM	59
	N	N		M	M		A	
	M	M		M	M		A	
$+$	$.$	$.$		$.$	$.$		0	
	8	4		M	M			

$$A + M + N = ?$$

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

20)

$$\frac{x}{y} = \frac{3}{7}$$

$$\frac{y+z}{3z} = \frac{3}{2}$$

$$\frac{y}{3x-z} = ?$$

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

21)

$$2x - y = x - 2y = 10$$

$$x = ?$$

- A) 2 B) $\frac{10}{3}$ C) 5 D) $\frac{-13}{3}$ E) 6

22)

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

$$P(0) = P(2)$$

$$P(3) = 47$$

$$a + b = ?$$

- A) 9 B) 14 C) 17 D) 20 E) 24

23)

$$Q(x) \neq 0$$

$$P(x) = (x-1).Q(x-a)$$

$$4P(x) + 9H(x) = 0$$

$$Q(0) = -H(a)$$

$$\rightarrow a = ?$$

- A) $\frac{7}{2}$ B) $\frac{9}{2}$ C) $\frac{13}{4}$ D) $\frac{-13}{4}$ E) $\frac{-9}{2}$

24)

$$B \subseteq A$$

$$C \not\subset A$$

$$A \cup C = \{a, b, c, d, e\}$$

$$A / B = \{a, b, c\}$$

$$A / C = \{b, c, d\}$$

$$B = ?$$

A) $\{a, c, d\}$ B) $\{c, d\}$ C) $\{e\}$

D) $\{d\}$ E) $\{e, c, d\}$

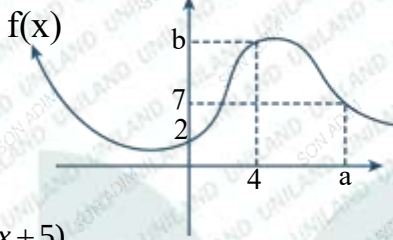
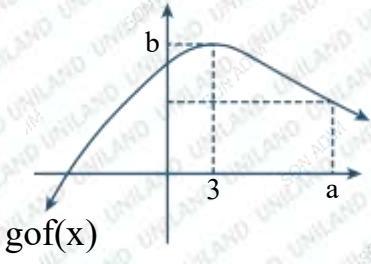
25)

$$\frac{x+1}{x-3} = \frac{x-1}{3} + \frac{x-2}{6}$$

$$x = ?$$

- A) 1 B) 3 C) -1 D) 2 E) 6

26)



$$f(x-2) = g(x+5)$$

$$fog(6) = gof(4)$$

$$gof(a) = f(-1)$$

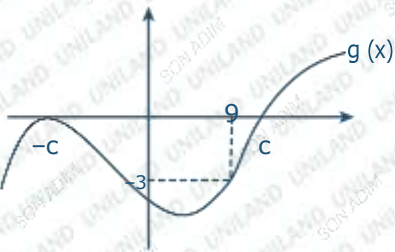
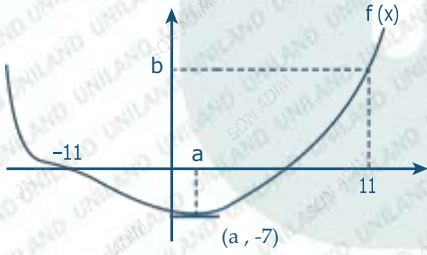
$$g(10) = 10$$

$$f(0) = 2$$

$$f(2) = ?$$

- A) 9 B) 10 C) 12 D) 13 E) 15

27)

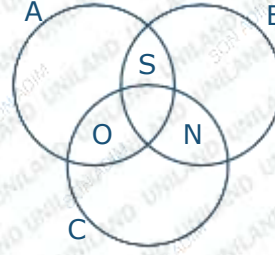


$$f(x+g(x)) = x.g(x) + x - c + b$$

$$a+b+c = ?$$

- A) 35 B) 39 C) 41 D) 46 E) 50

28)



$$A = \{1, 2, 3, 6\}$$

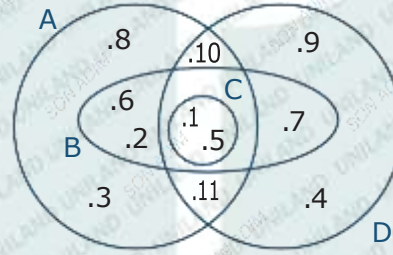
$$B = \{2, 3, 5\}$$

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

$$S + O + N = ?$$

- A) 9 B) 10 C) 11 D) 12 E) 13

29)



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

- A) {7,10,11} B) {10,11} C) {1,5} D) {2,6,7} E) {11}

30)

x, y tamsayılarıdır.

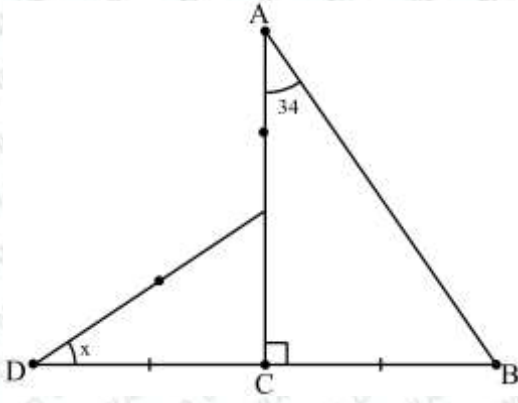
$$|x-6| = |x+2|$$

$$|y+1| = |2y-6|$$

$$x-y = ?$$

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

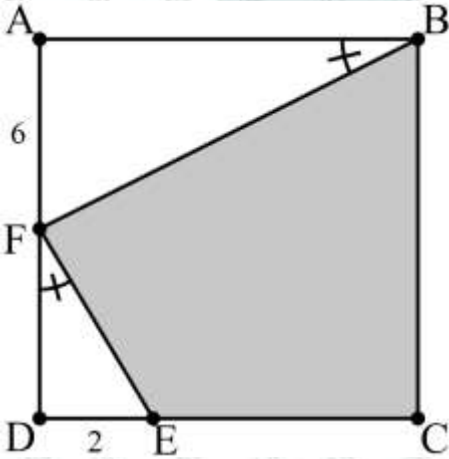
31)



X=?

- A) 22 B) 29 C) 38 D) 42 E) 53

32)

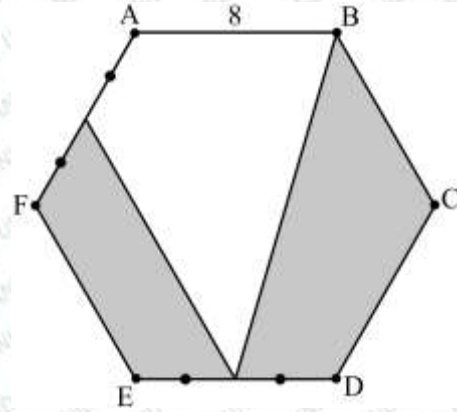


ABCD kare olduğuna göre,

taralı alan = ?

- A) 49 B) 50 C) 51 D) 53 E) 55

33)

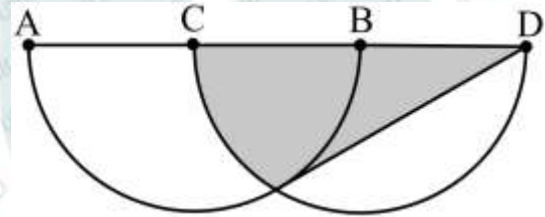


Yandaki şekil düzgün altıgen olduğuna göre,

taralı alanların toplamı kaçtır?

- A) 37 B) 48 C) $\sqrt{1364}$ D) 52 E) $52\sqrt{3}$

34)

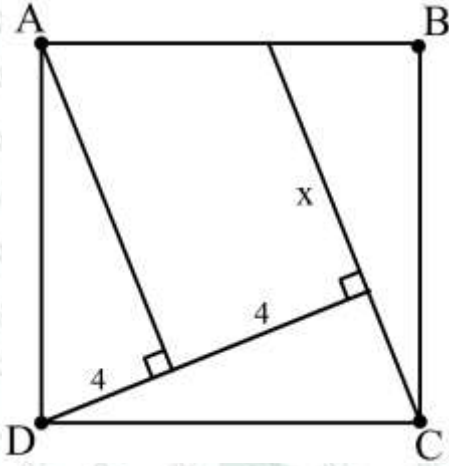


|AD| = 18

Talı alan = ?

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

35)

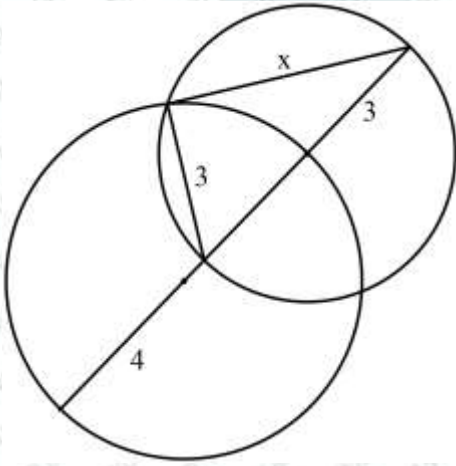


ABCD kare olduğuna göre,

 $x = ?$

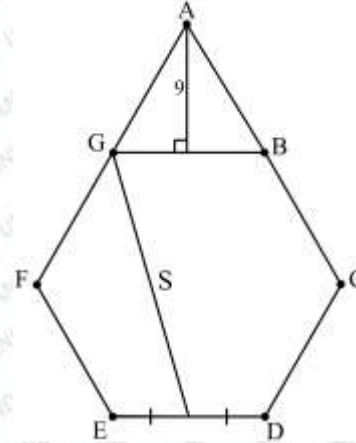
- A) 4 B) 8 C) 6 D) 5 E) 7

36)

 $x = ?$

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

37)



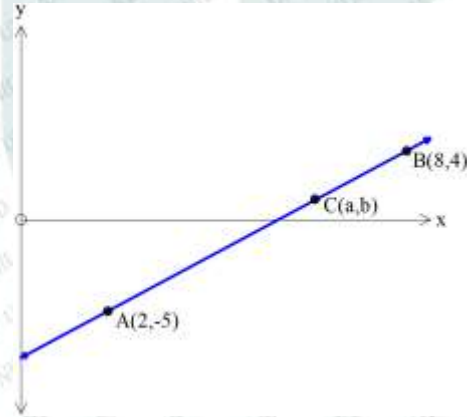
ABG eşkenar üçgen

BCDEFG düzgün altıgen olduğuna göre,

 $S = ?$

- A) 19 B) 22 C)
- $\sqrt{345}$
- D) 18 E)
- $\sqrt{351}$

38)



$$C \in |AB|$$

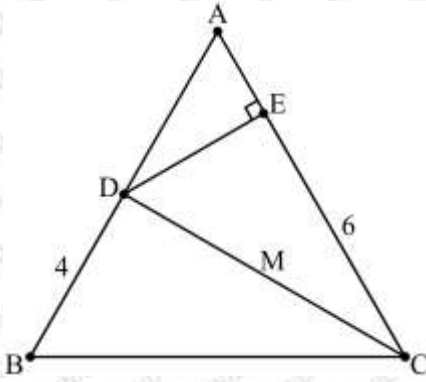
$$3|AC| = |AB|$$

Olduğuna göre

 $(a, b) = ?$

- A)
- $(-2, 2)$
- B)
- $(-2, 4)$
- C)
- $(4, -2)$
-
- D)
- $(3, -2)$
- E)
- $(4, 3)$

39)

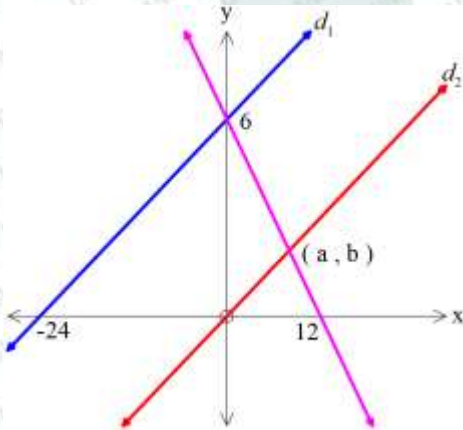


ABC eşkenar üçgen ise,

 $M = ?$

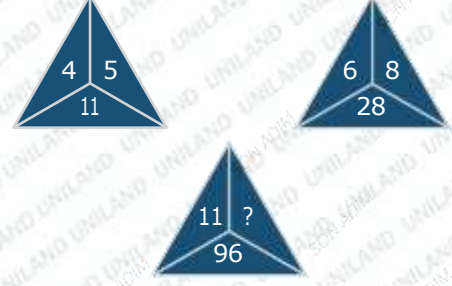
- A) 8 B) 10 C) $\sqrt{48}$ D) 9 E) $\sqrt{58}$

40)



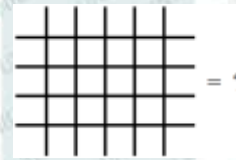
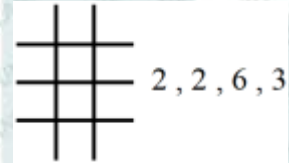
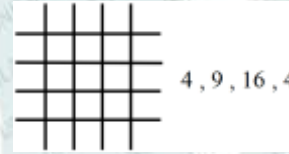
- A) (8, 2) B) (7, 4) C) (9, 2)
D) (2, 8) E) (4, 1)

41)



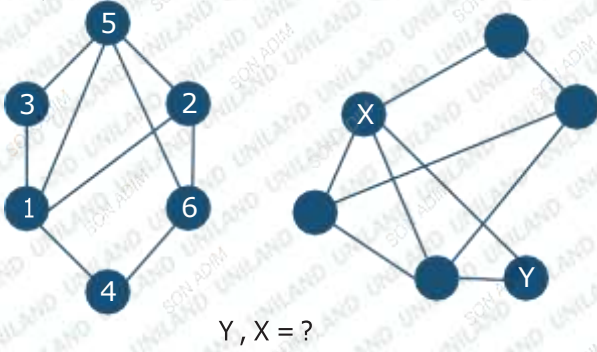
- A) 16 B) 15 C) 37 D) 25 E) 36

42)



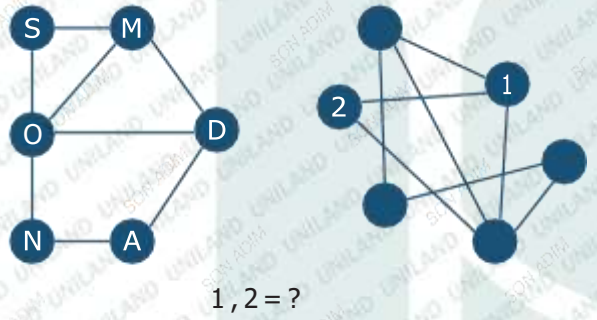
- A) 5,10,20,5 B) 5,12,16,3 C) 5,12,20,4
D) 4,12,25,4 E) 5,10,25,4

43)



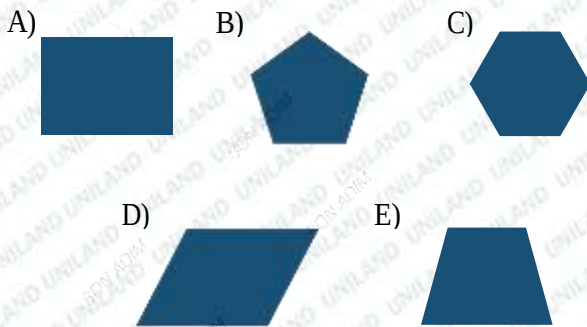
- A) 2,1 B) 3,5 C) 4,5 D) 3,1 E) 4,6

44)



- A) A,D B) N,D C) A,M D) M,S E) M,O

45)



46)

TOZLU 25314

SUMAK 47965

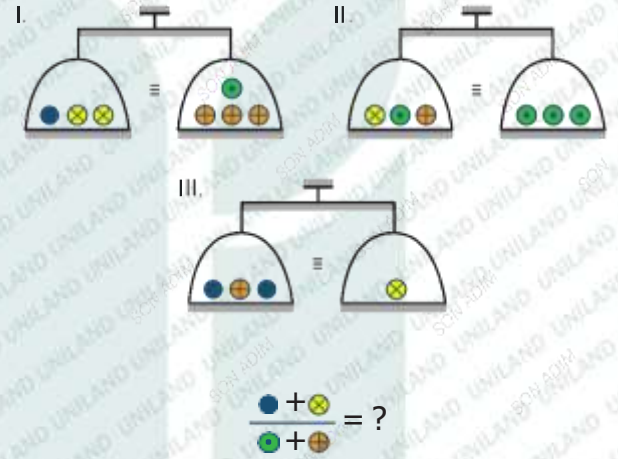
LOKNUM 65021

MANTO 81473

OSTAM = ?

- A) 52814 B) 52874 C) 42876
D) 58674 E) 02576

47)



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

48)

 $a, b, c > 0$

$\times$	a	b	c
a			$9b$
b	c		
c		$4a$	

 $a + b + c = ?$

- A) 11 B) 23 C) 34 D) 18 E) 30

49)

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

×	a	b	c
a	x		
b		y	
c			z

 $x.y.z = ?$

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

50)

İVME

ÖYVÜ

PERÜ

ATKI

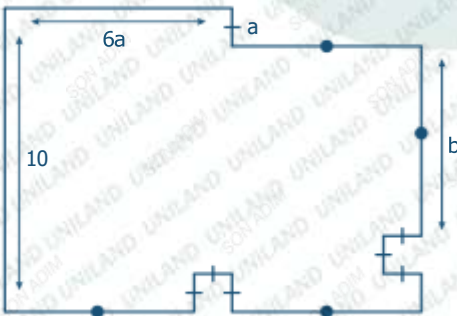
USİN

AKTÖR = ?



- A) B) C) D) E)

51)



ÇEVRE KAÇTIR?

- A) 44 B) 50 C) 52 D) 54 E) 55

52)

$$\boxed{18} = 96321$$

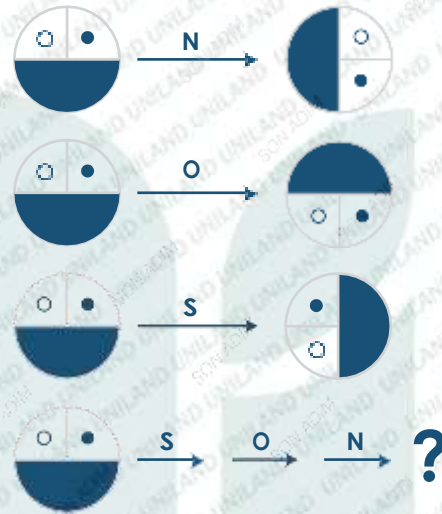
$$\boxed{8} = 421$$

$$\boxed{17} = 1$$

$$\boxed{15} = \text{?????}$$

- A) 15531 B) 531 C) 351 D) 532 E) 315

53)



- A) B) C) D) E)

54)



- A) B) C) D) E)

55)



= ?

A)



B)



C)



D)



E)



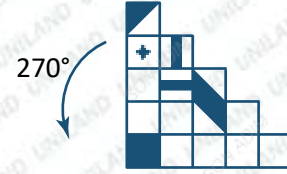
56)

10	12	11	8	7	9
9	11	4	14	7	9
12	11	8	9	6	5
7	10	12	4	6	9
8	11	5	10	4	7
A	6	4	B	8	12

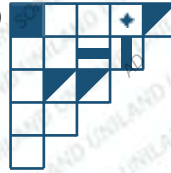
A + B = ?

A) 12 B) 16 C) 20 D) 15 E) 18

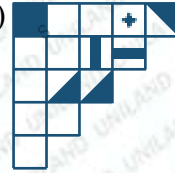
57)



A)



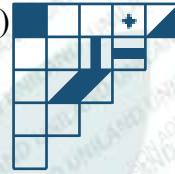
B)



C)



D)



E)



58)



A)



B)



C)



D)

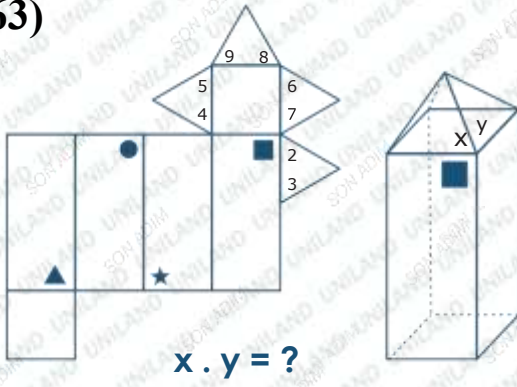


E)



A) 162 B) 96 C) 180 D) 164 E) 120

63)



- A) 14 B) 24 C) 21 D) 27 E) 18

64)



- A) B) C)
 D) E)

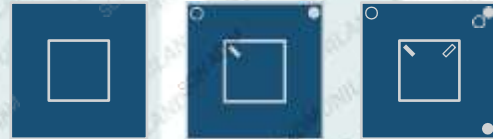
65)

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

4	
	1
	3
4	

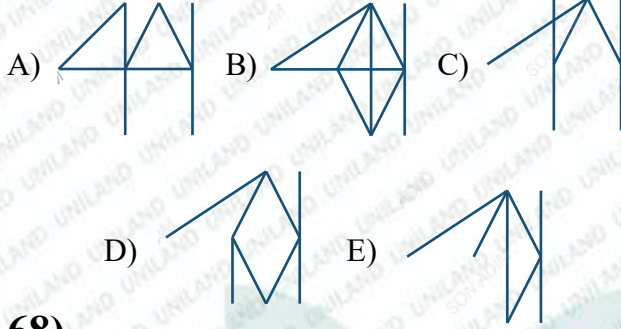
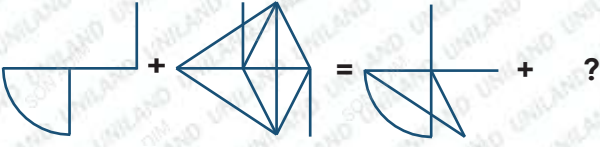
- 1 3
 A) b c
 B) c a
 C) d e
 D) c b
 E) a c

66)

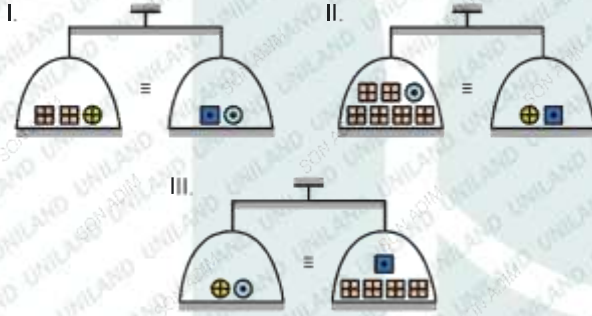


- A) B) C)
 D) E)

67)



68)

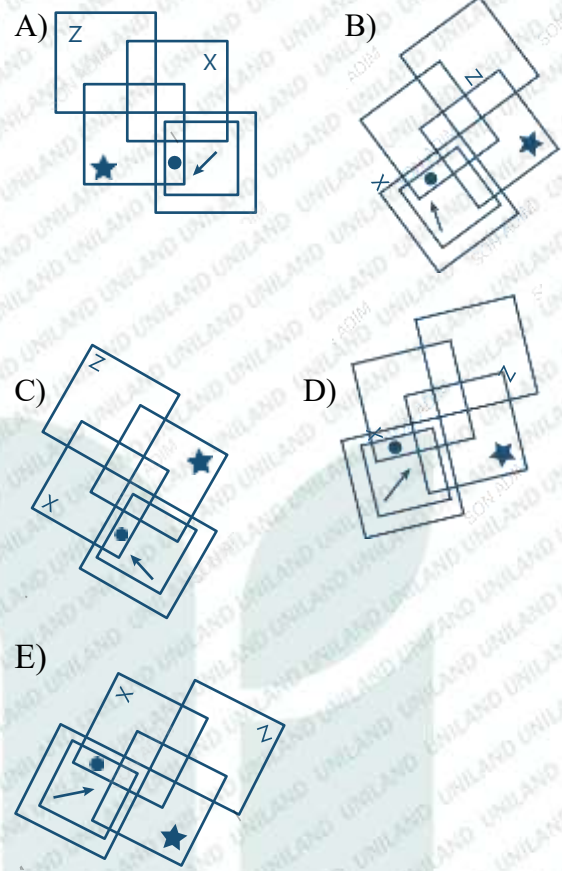


??>??>??

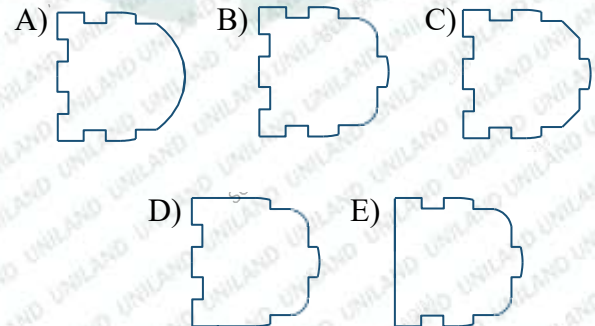
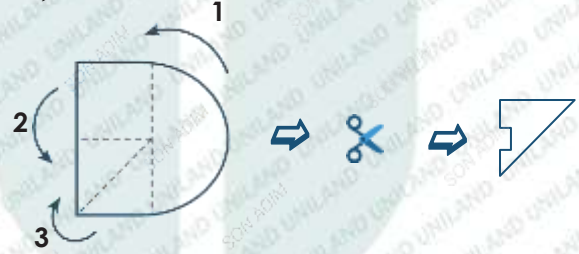
- A) B) C) D) E)

69)

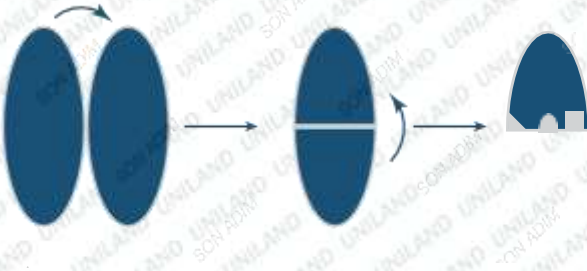
Hangisi diğerlerinden farklıdır?



70)



71)



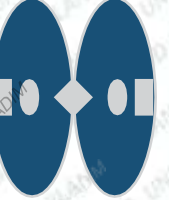
A)



B)



C)



D)



E)



72)



A)



B)



C)



D)



E)



73)

Hangisi diğerlerinden farklıdır?

A)



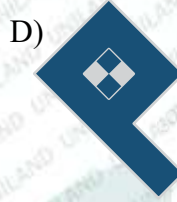
B)



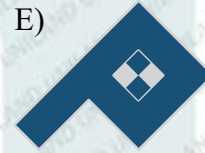
C)



D)



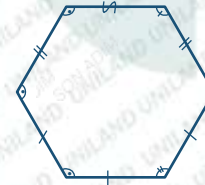
E)



74)



$$(2.2.2.3) + (4.3) = 24$$



$$= 9$$



$$= ?$$

A) 14

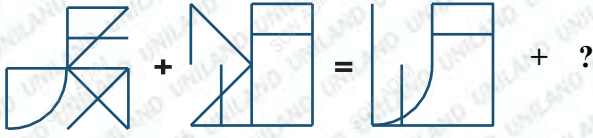
B) 12

C) 15

D) 6

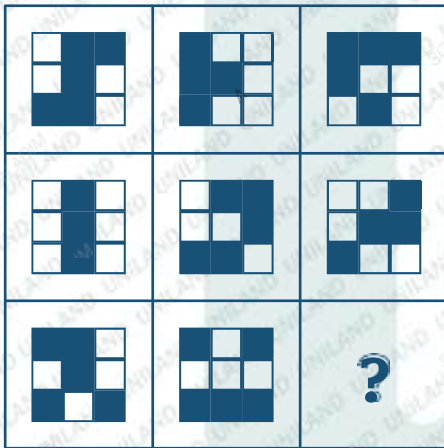
E) 24

75)



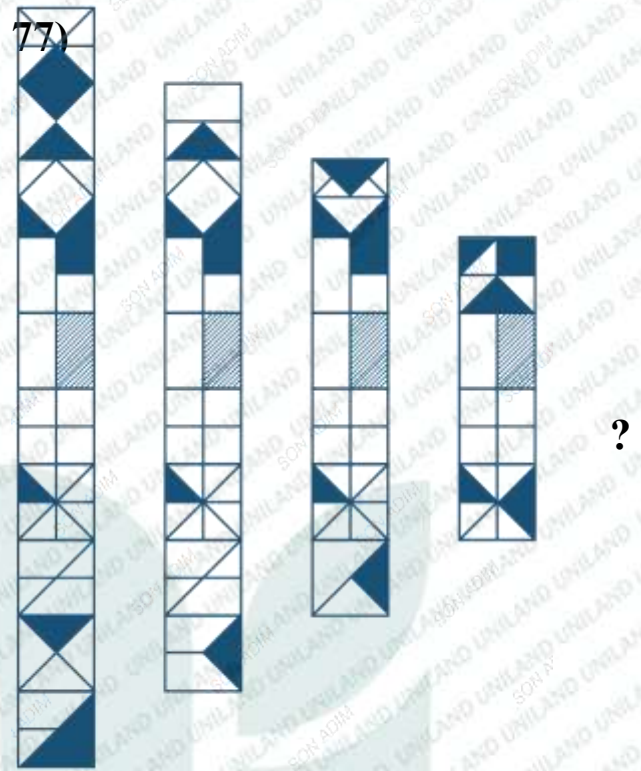
- A) B) C) D) E)

76)



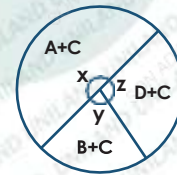
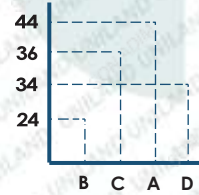
- A) B) C) D) E)

77)



- A) B) C) D) E)

78)



- A) B) C) D) E)

79)



A)



B)



C)



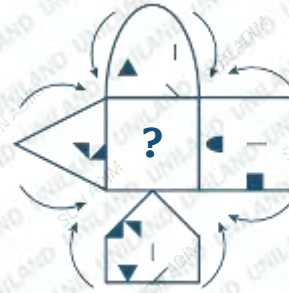
D)



E)



80)



A)



B)



C)



D)



E)

