

1.  $A = \{1,2,3\}$  ,  $B = \{1,2,3,4,5,6,7\}$

$A \subset x \subset B$

buna göre  $x$  kaç tane küme oluşturur?

A)4 B)5 C)16 D)17 E)32

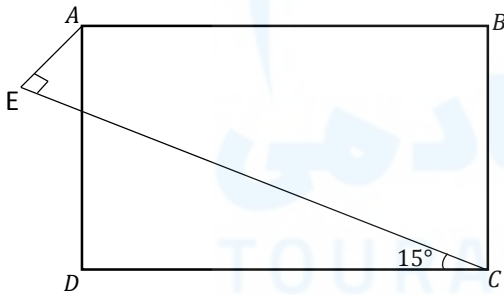
A) B) C) D) E)

2.  $6! + 4^{2018} + 3^4 = x \pmod{5}$

$x = ?$

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

3.

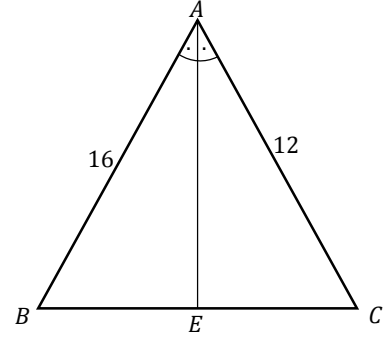


$ABCD$  bir kare ve  $|AE| = 2\sqrt{3}$

$\Rightarrow |AB| = ?$

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

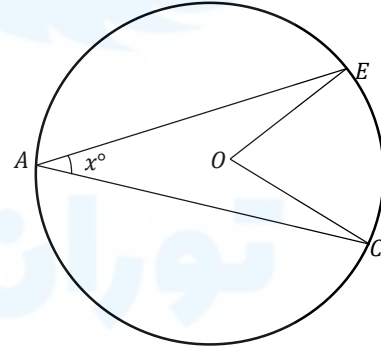
4.



$m(\hat{BAE}) = m(\hat{EAC}) = 45^\circ$  ,  $[AE]$  açıortay,  
 $|BA| = 16$  ve  $|AC| = 12$  olduğuna göre  $|EC| = ?$

A) $\frac{60}{7}$  B) $\frac{80}{7}$  C) $\frac{45}{7}$  D) $\frac{60}{7}$  E) $\frac{55}{7}$

5.

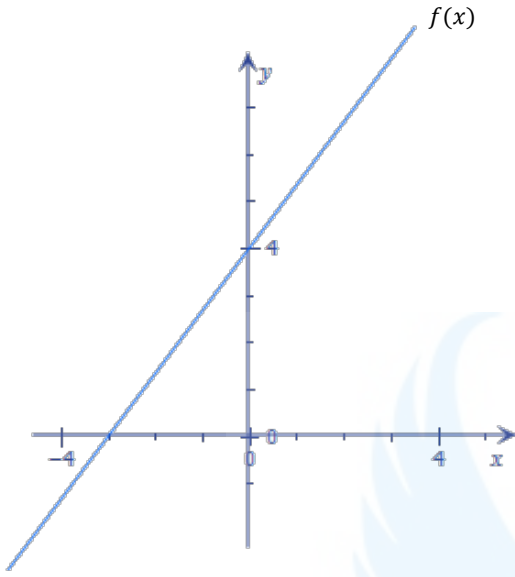


$O$  merkezli çemberde  $m(\hat{EOC}) = 32^\circ$

Buna göre  $x$  kaçtır?

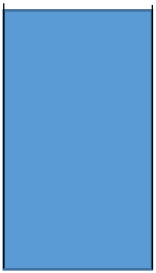
A)64 B)32 C)18 D)16 E)29

6.

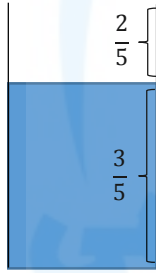

 $\Rightarrow f(10) = ?$ 

- A)  $\frac{42}{3}$     B)  $\frac{52}{4}$     C)  $\frac{62}{3}$     D)  $\frac{52}{3}$     E)  $\frac{54}{3}$

7. I.



II.



III.



Birinci kabın tamamı suyla doluyken  $\frac{2}{5}$  i buharlaştırıldığında 2.ci şekil elde edildi, sonra 2.ci şekilde kalan suyun  $\frac{3}{4}$  ü buharlaştırıldığında 3.ncü şekil elde edildi. 3.ncü şekilde kalan su miktarı 1,5 gr olduğuna göre kabın tamamı kaç gr su sığar?

- A)10    B)20    C)15    D)12    E)16

8.  $(p \Rightarrow q) \vee r' \equiv 0$ 

buna göre aşağıdakilerden hangisi doğrudur?

- A)  $p \equiv 1$  ,  $q \equiv 0$  ,  $r \equiv 1$   
 B)  $p \equiv 1$  ,  $q \equiv 1$  ,  $r \equiv 1$   
 C)  $p \equiv 1$  ,  $q \equiv 0$  ,  $r \equiv 0$   
 D)  $p \equiv 0$  ,  $q \equiv 0$  ,  $r \equiv 1$   
 E)  $p \equiv 0$  ,  $q \equiv 1$  ,  $r \equiv 0$

9.  $f(x) = \frac{d}{dx} \left( \frac{2}{x+1} \right) \Rightarrow f'(1) = ?$ 

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

10.  $\int_0^2 \frac{x+1}{x+2} dx = ?$ 

- A)  $2 + \ln 2$     B)  $2 - \ln 4$     C)  $2 - \ln 2$   
 D)  $1 - \ln 2$     E)  $2 + \ln 4$

$$11. \int f(x) dx = 2x^3 - 6x^2 + 4x + 9$$

$$\Rightarrow f''(2) = ?$$

A) -12    B)24    C)0    D)12    E) -24

$$12. \frac{\frac{1}{3} - \frac{20}{12} - \frac{13}{49}}{\frac{20}{12} + \frac{13}{49} - \frac{1}{3}} = ?$$

A)  $\frac{159}{100}$     B)  $\frac{235}{147}$     C)1    D)  $-\frac{235}{147}$     E) -1

$$13. a < 0 < b$$

$$\Rightarrow |3a| + |b - a| + |2b| = ?$$

A)  $4a - 3b$     B)  $3b + 2a$     C)  $b - 2a$   
D)  $-4a - b$     E)  $3b - 4a$

$$14. \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}} - \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}} + \frac{6}{\sqrt{6}} = ?$$

A)  $3\sqrt{6}$     B)  $\frac{\sqrt{3} + \sqrt{2}}{2}$     C)  $5\sqrt{6}$   
D)  $\sqrt{6}$     E)  $\sqrt{3} + \sqrt{2}$

$$15. 8007 + 18 + 0,014 + 0,4 = ?$$

A)8025,054    B)8025,45    C)8029,414  
D)8025,414    E)8029,14

$$16. \frac{(1-i)^{16} + (i+1)^{17}}{1+i} = ?$$

A)  $2^7(3+i)$     B)  $2^8(1+i)$     C)  $2^8(3-i)$   
D)  $2^7(3-i)$     E)  $2^7(1-i)$

$$17. \frac{0, a + 0,0a}{0, \bar{a} + 0,0\bar{a}} = ?$$

A)0,9    B)1,9    C)  $\frac{11}{90}$     D)  $\frac{121}{9000}$     E)  $\frac{121a^2}{9000}$

$$18. f(x) = \frac{x-5}{x-2}$$

$$\Rightarrow (f^{-1} \circ f^{-1})(3) = ?$$

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

$$19. \log_{\sqrt{2}} 16 + \log_3 \sqrt{3} - \log_{100} 10 = ?$$

A)  $\frac{11}{2}$     B)  $\frac{5}{2}$     C)  $\frac{13}{2}$     D)8    E)4

20.  $\cos \frac{5\pi}{3} + \tan \frac{4\pi}{3} = ?$

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

21.  $\sin^2 \frac{\pi}{10} + \cos^2 \frac{\pi}{10} + 2 \cot \frac{7\pi}{4} = ?$

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

22.  $\frac{x^3 - 8}{x^2 - 4} : \frac{x^2 + 2x + 4}{x^2 + 4x + 4} = ?$

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

23.  $A = 20 + 22 + \dots + 60$

$A = ?$

- A) 1830    B) 480    C) 840    D) 720    E) 360

24.  $\int_0^2 e^{x^2 - 4x} (x - 2) dx = ?$

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

25.

$f(x) = (x^2 + 2x - 1)^5 + \pi^2$

$f'(0) = ?$

- A) 10    B)  $-10$     C)  $10 + 2\pi$     D)  $-10 + 2\pi$     E) 0

26.  $x + \frac{1}{x} = \frac{5}{2} \Rightarrow x^2 + \frac{1}{x^2} = ?$

- A)  $\frac{9}{4}$     B)  $\frac{16}{4}$     C)  $\frac{18}{4}$     D)  $\frac{17}{4}$     E)  $\frac{33}{4}$

27.  $P(x^3) = x^3 + 3x^6 + 2x^3 + 8$

$P(\sqrt{2}) = ?$

- A)  $14 + 3\sqrt{2}$     B)  $14 + 2\sqrt{2}$     C)  $12 + 3\sqrt{2}$   
 D)  $14 - 3\sqrt{2}$     E)  $12 - 2\sqrt{2}$

$$28. \lim_{x \rightarrow \infty} \frac{(a-2)x^3 + (b+2)x^2 + 3x + 1}{3x^2 + 6x + 5} = \frac{5}{6}$$

$$\Rightarrow a \cdot b = ?$$

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

$$29. 3 + \frac{7}{-2 + \frac{3}{x-4}} = 10 \Rightarrow x = ?$$

A) 7    B) 6    C) 5    D) 4    E) 3

$$30. \frac{32^{x+1}}{2^{x+1}} = 8 \Rightarrow x = ?$$

A)  $-\frac{2}{3}$     B)  $-\frac{1}{3}$     C)  $-\frac{1}{4}$     D)  $\frac{1}{4}$     E) 0

31.  $x^2 \cdot y^3 < 0$ ,  $y^3 \cdot z^5 > 0$ ,  $x^7 \cdot z < 0$   
yukarıda verilen eşitsizliğe göre aşağıdakilerden hangisi doğrudur?

- A)  $x < 0, y < 0, z > 0$   
B)  $x < 0, y < 0, z < 0$   
C)  $x > 0, y < 0, z > 0$   
D)  $x > 0, y < 0, z < 0$   
E)  $x < 0, y < 0, z < 0$

$$32. \frac{1 + i + i^2 + i^3 + \dots + i^{97}}{1 + i} = ?$$

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

33. Türkiye  ?

Yansımayı bulunuz.

A)     B)  $\frac{1}{\text{Türkiye}}$

C) Türkiye    D) 

E) 

34.

$$2 e 5 = 9$$

$$3 e 6 = 12$$

$$5 e 3 = 13$$

$$8 e 2 = ?$$

A) 66    B) 62    C) 14    D) 18    E) 20

35.

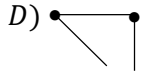
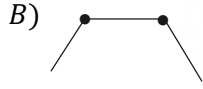
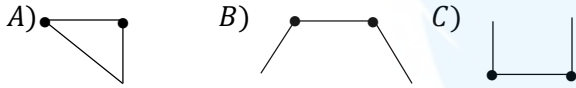
$$4 * 2 = 10$$

$$36 * 6 = 222$$

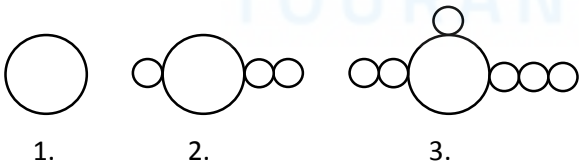
$$8 * 4 = ?$$

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

36. aşağıdaki diziyi takip eden 7. şekil nedir?



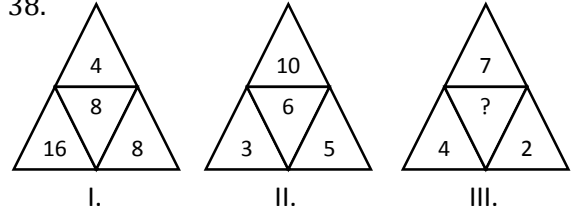
37.



Yukarıdaki seriye göre 8.nci şekilde toplam kaç tane daire vardır?

A)20 B)21 C)22 D)23 E)24

38.



Belli bir kurala göre oluşturulmuş sayı örüntüsünde III. şekilde soru işaretinin (?) yerine hangi sayı getirilmelidir?

A)4 B)6 C)12 D)14 E)16

39.  $A \neq B \neq C \neq D \neq E \neq F \neq G$ 

$$A = 3 \cdot C, D = 2 \cdot C, G = 2 \cdot F, C = E + F$$

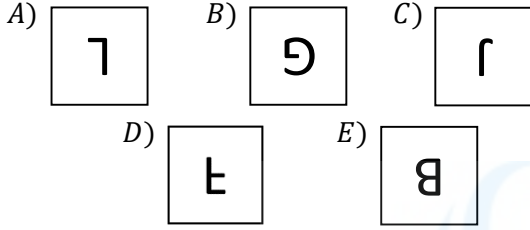
$$H = 7$$

$$EFGC \cdot H < ABCD$$

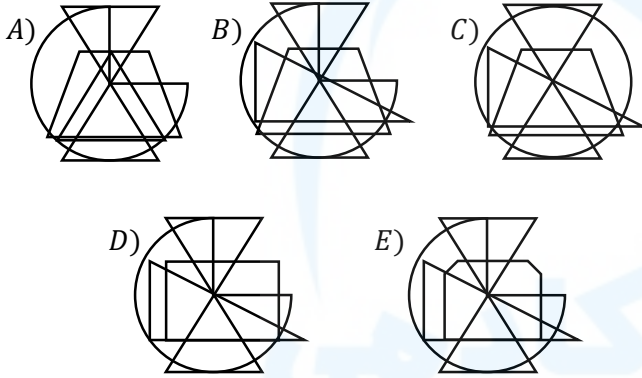
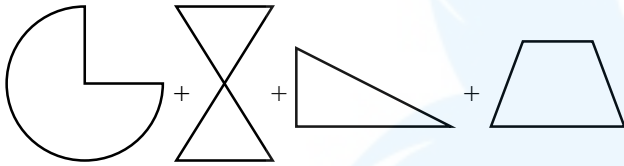
$$\Rightarrow ABCD = ?$$

A)9836 B)9724 C)9532 D)9053 E)9824

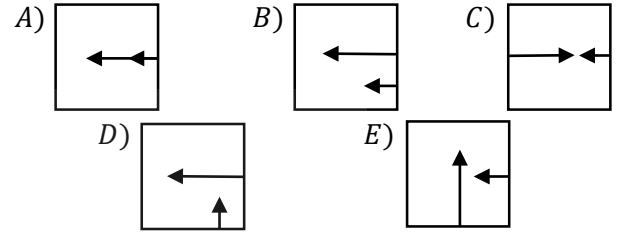
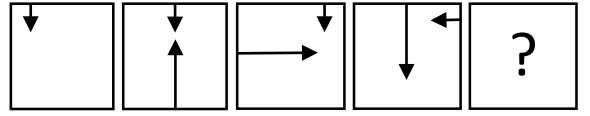
40. aşağıdakilerden hangisi diğerlerinden farklıdır?



41.



42.



43.



Yukarıdaki şekli kesirli halde yazınız.

- A) 2 B)  $\frac{3}{2}$  C)  $\frac{5}{4}$  D)  $\frac{11}{12}$  E) 1

44. 3, 3, 6, 9, 15, 24, 39, x, y

$x + y = ?$

- A) 161 B) 162 C) 163 D) 164 E) 165

45.  $4 \cdot \circ = 12 \cdot \odot = 3 \cdot \ominus = 8 \cdot \omin�$

$$\frac{\omin� + \odot}{\circ + \omin� + \omin�} = ?$$

- A)  $\frac{5}{8}$     B)  $\frac{2}{3}$     C)  $\frac{5}{7}$     D)  $\frac{10}{17}$     E)  $\frac{10}{19}$

46.  $\square \cdot (\Delta + \circ) = 40$

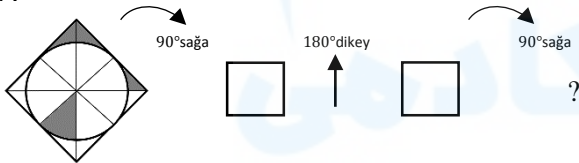
$\Delta : \square = \circ$

$\Delta - \circ = \circ$

$\Delta + \circ - \square = ?$

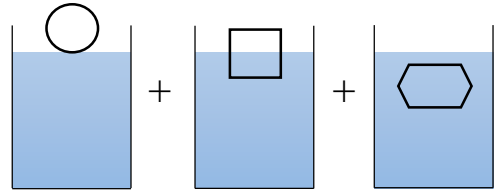
- A) -2    B) 0    C) 18    D) 12    E) 22

47.



- A)    B)    C)    D)    E)

48.



- A)    B)    C)    D)    E)

49.

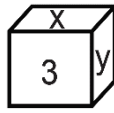
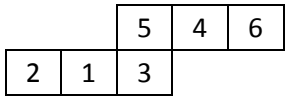


Yukarıdaki şeklin tamamlayıcı hangisidir?

- A)    B)    C)    D)    E)



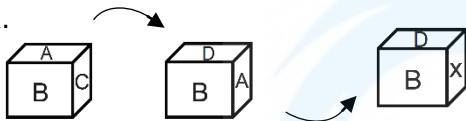
50.



$x = ? , y = ?$

- A)  $x = 4, y = 5$
- B)  $x = 5, y = 1$
- C)  $x = 6, y = 1$
- D)  $x = 1, y = 6$
- E)  $x = 6, y = 4$

51.



$x = ?$

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

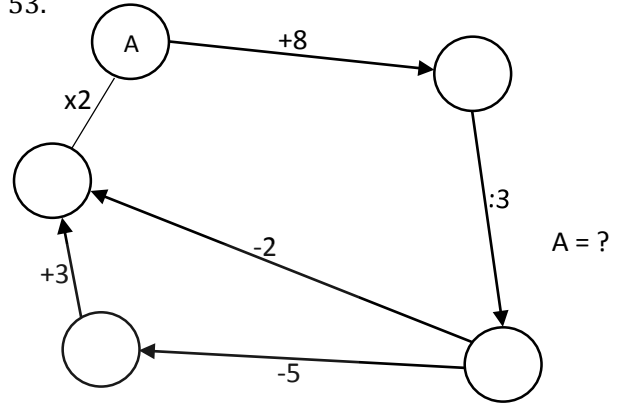
52.



Aşağıda ilk 3 adımı verilen şeklin V. adımı hangisi olmalıdır?

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

53.



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

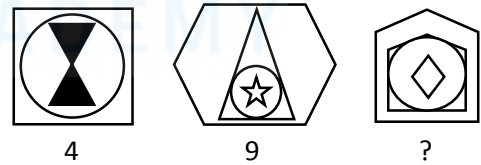
54.  $A = 5 + 10 + 15 + 20 + \dots + 200$

$B = 7 + 11 + 15 + \dots + 203$

$A - B = ?$

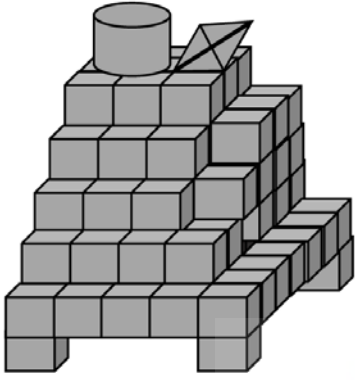
- A) 1150
- B) -1150
- C) 1050
- D) -1050
- E) 0

55.

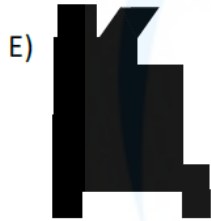
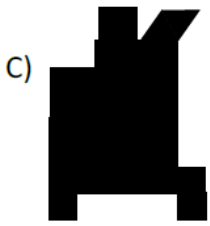
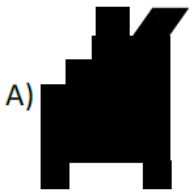


- A) 5
- B) 6
- C) 7
- D) 8
- E) 9

56.



Yukarıdaki şeklin önden görünümü hangisidir?



**BAÜNYÖS 2018****CEVEP ANAHTARI****ANSWER KEY**

## مفتاح الأجوبة

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