

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

$$A \subset x \subset B$$

buna göre  $x$  kaç tane kümeye oluşturur?

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

- A)      B)      C)      D)      E)

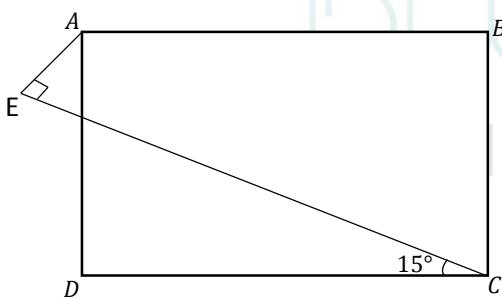


2.  $6! + 4^{2018} + 3^4 = x \pmod{5}$

$$x = ?$$

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

3.

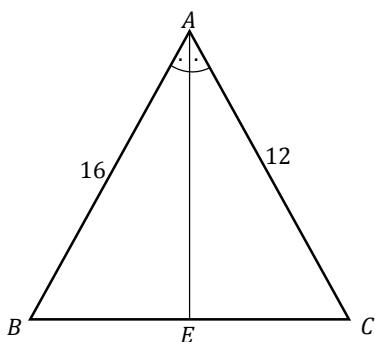


$ABCD$  bir kare ve  $|AE| = 2\sqrt{3}$

$$\Rightarrow |AB| = ?$$

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

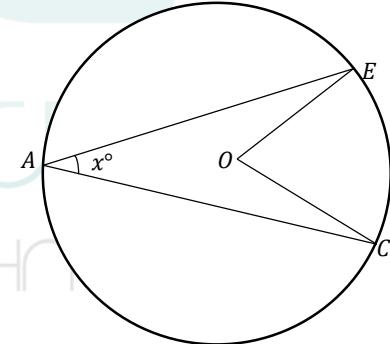
4.



$m(B\hat{A}E) = m(E\hat{A}C) = 45^\circ$ ,  $[AE]$  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.

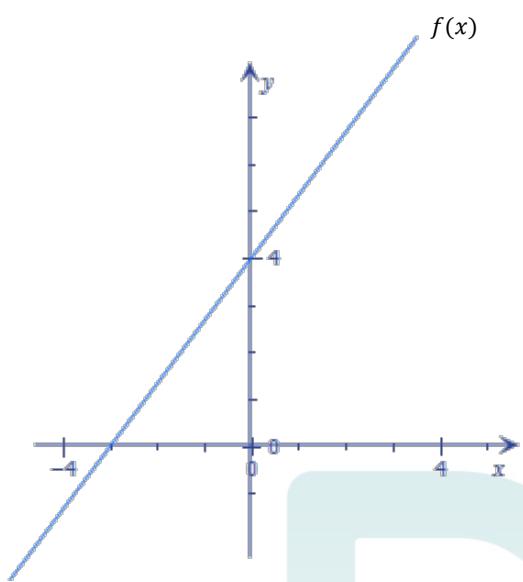


$O$  merkezli çemberde  $m(E\hat{O}C) = 32^\circ$

Buna göre  $x$  kaçtır?

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

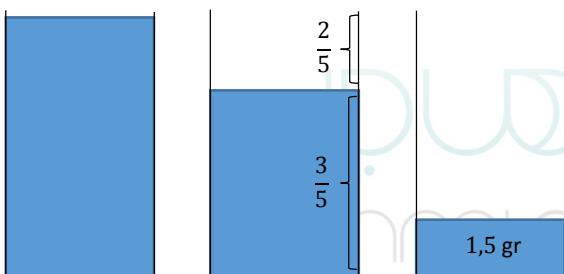
6.



$$\Rightarrow f(10) = ?$$

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

7.



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 ede edildi. 3.ncü şekilde kalan su miktarı 1,5  
gr olduğuna göre kabın tamamı kaç gr su sıgar?

- 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.  $x^2 \cdot y^3 < 0, \quad y^3 \cdot z^5 > 0, \quad x^7 \cdot z < 0$

yukarıda verilen eşitsizlige 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.  $\frac{1+i+i^2+i^3+\cdots i^{97}}{1+i} = ?$

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

33. Türkiye  ?

Yansımayı bulunuz.

- A)  TURKIYE  
 B)  $\frac{1}{\text{Türkiye}}$   
 C)  Türkiye  
 D)  eyikrüT  
 E)  Türkîye

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.

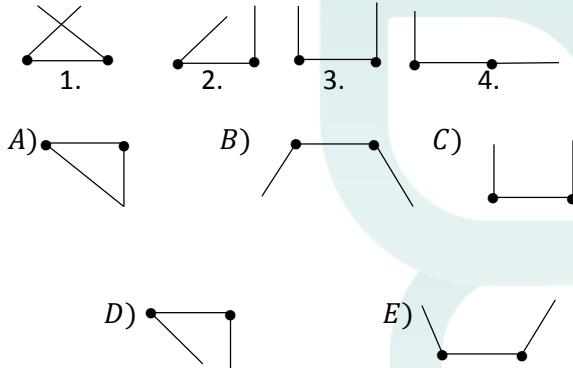
$$4 * 2 = 10$$

$$36 * 6 = 222$$

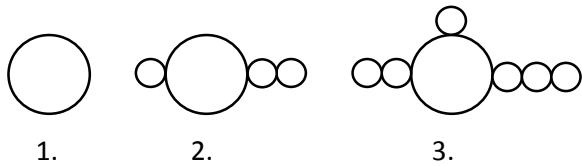
$$8 * 4 = ?$$

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

36. aşağıdaki diziyi takip eden 7. şekil nedir?



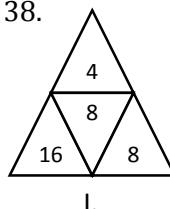
37.



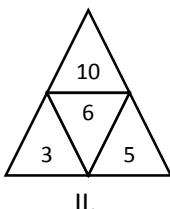
Yukarıdaki seride göre 8.nci şekilde toplam kaç tane daire vardır?

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

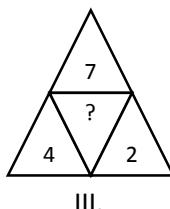
38.



I.



II.



III.

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

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

$$H = 7$$

$$EFGC \cdot H < ABCD$$

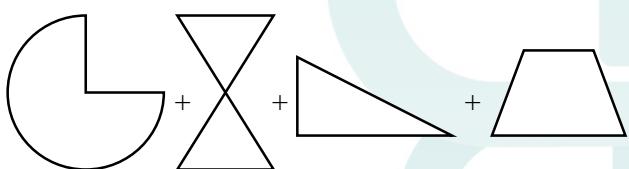
$$\Rightarrow ABCD = ?$$

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

40. aşağıdakilerden hangisi diğerlerinden farklıdır?

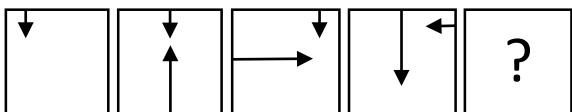
- A) B) C)   
 D) E)

41.



- A) B) C)   
 D) E)

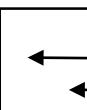
42.



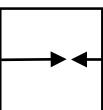
A)



B)



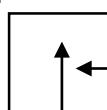
C)



D)



E)



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.  $4 \cdot \circ = 12 \cdot \odot = 3 \cdot \ominus = 8 \cdot \oplus$

$$\frac{\ominus + \oplus}{\circ + \odot + \ominus} = ?$$

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

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

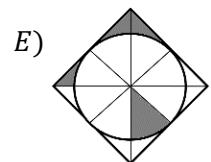
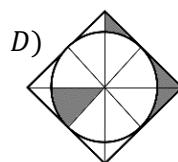
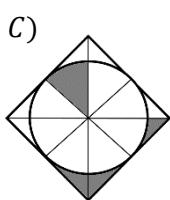
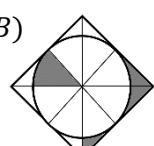
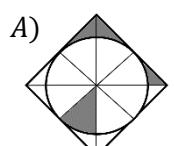
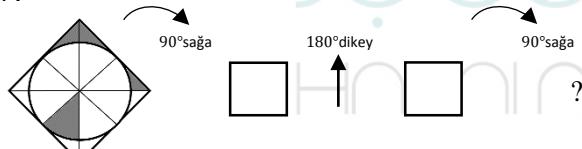
$\Delta : \square = \circ$

$\Delta - \circ = \circ$

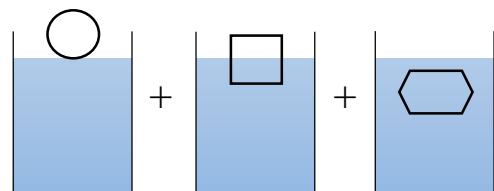
$\Delta + \circ - \square = ?$

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

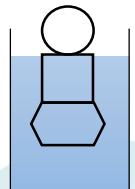
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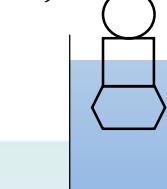
48.



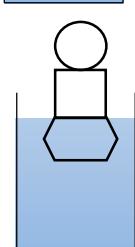
A)



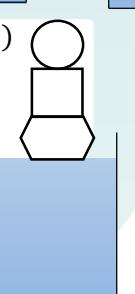
B)



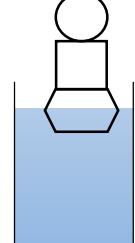
C)



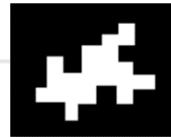
D)



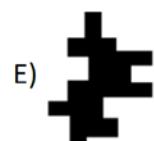
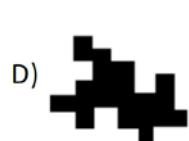
E)



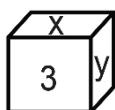
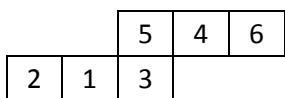
49.



Yukarıdaki şeklin tamamlayını hangisidir?



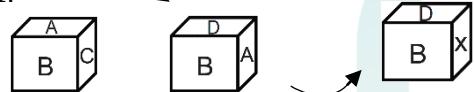
50.



$x = ? , y = ?$

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

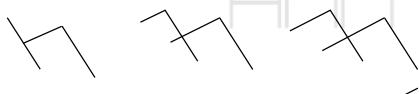
51.



$x = ?$

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

52.



1.adım

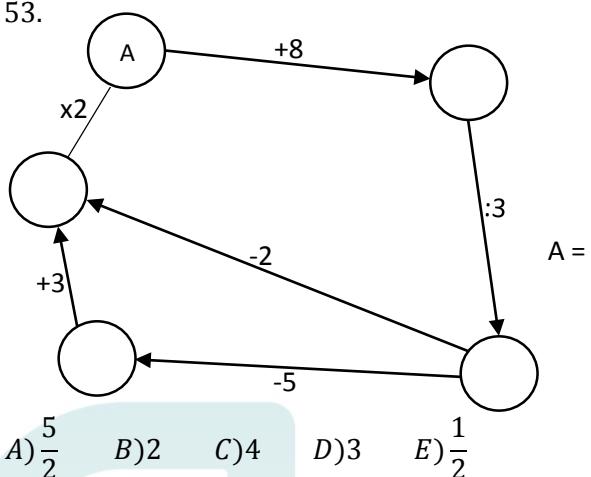
2.adım

3.adım

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

- A)    B)    C)   
 D)    E)

53.

A)  $\frac{5}{2}$ 

B) 2

C) 4

D) 3

E)  $\frac{1}{2}$ 

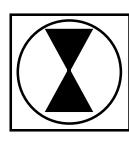
$A = 5 + 10 + 15 + 20 + \dots + 200$

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

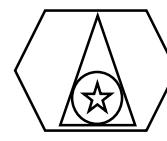
$A - B = ?$

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

55.



4



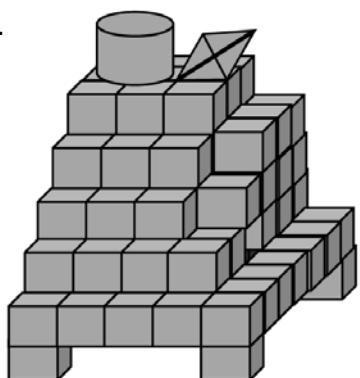
9



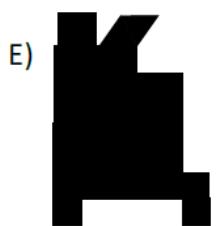
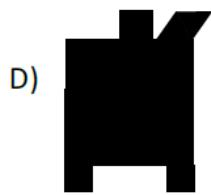
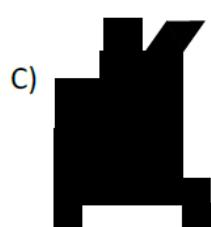
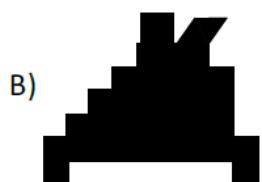
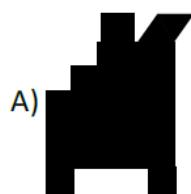
?

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

56.



Yukarıdaki şeitin 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. - |