

Bu testte cevaplayacağınız toplam soru sayısı 80'dir.

$$1. \quad \frac{\frac{1}{2}}{1 + \frac{1}{4}} + \frac{3}{5}$$

$$\frac{\frac{1}{2}}{\frac{5}{4}} + \frac{3}{5} = \frac{1}{2} \cdot \frac{4}{5} + \frac{3}{5} = \frac{2+3}{5} = 1$$

Cevap: A

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

$$+ \quad x = \frac{0,5}{0,4} + \frac{4,1}{1,4} + \frac{7,1}{3,5}$$

$$A + x = \frac{0,8}{0,4} + \frac{2,8}{1,4} + \frac{10,5}{3,5}$$

$$A + x = \frac{8}{4} + \frac{28}{14} + \frac{105}{35}$$

$$A + x = 2 + 2 + 3$$

$$A + x = 7$$

$$x = 7 - A$$

Cevap: C

$$3. \quad \left(0,9 + \frac{0,8}{0,4}\right) \left(2 - \frac{9}{10}\right) + 0,81$$

$$\left(\frac{9}{10} + \frac{8}{4}\right) \cdot \left(\frac{20-9}{10}\right) + \frac{81}{100}$$

$$\left(\frac{9}{10} + 2\right) \left(\frac{11}{10}\right) + \frac{81}{100}$$

$$\frac{29}{10} \cdot \frac{11}{10} + \frac{81}{100}$$

$$\frac{319}{100} + \frac{81}{100} = \frac{400}{100} = 4$$

Cevap: D

$$4. \quad \frac{x - \frac{4}{x}}{x - \frac{8}{x} + 2} = \frac{\frac{x^2 - 4}{x}}{\frac{x^2 - 8 + 2x}{x}} = \frac{(x-2)(x+2)}{(x+4)(x-2)} = \frac{x+2}{x+4}$$

Cevap: C

$$5. \quad A = \frac{2}{2 + \frac{1}{5}} = \frac{2}{\frac{11}{5}} = \frac{10}{11}$$

$$B = \frac{2}{1 - A} = \frac{2}{1 - \frac{10}{11}} = \frac{2}{\frac{1}{11}} = 22$$

$$\Rightarrow A \cdot B = \frac{10}{11} \cdot 22 = 20$$

Cevap: C

$$6. \quad \frac{1}{m-3} + 2m = 6 - \frac{1}{3-m}$$

$$2m - 6 = -\frac{1}{3-m} - \frac{1}{m-3}$$

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

$$2m - 6 = 0$$

$$2m = 6$$

$$m = 3 \rightarrow \text{Paydayı 0 yapıyor.}$$

$$\Rightarrow \text{ÇK(SS)} = \emptyset$$

Cevap: A

7. • $x + z = 2 \rightarrow z = 2 - x$
 $y + m = -2 \rightarrow m = -2 - y$
 • $z \cdot m = 13$ ve $x \cdot y = 3$
 $(2 - x)(-2 - y) = 13$
 $-4 - 2y + 2x + xy = 13$
 $-4 + 2(x - y) + 3 = 13$
 $2(x - y) - 1 = 13$
 $2(x - y) = 14$
 $x - y = 7$

Cevap: D

8. $27^{a+1} = 8^b$
 $4^a = 9^{b-1}$
 $\Rightarrow 3^{3a+3} = 2^{3b}$
 $3^{2b-2} = 2^{2a}$
 $\Rightarrow \frac{3a+3}{2b-2} = \frac{3b}{2a}$
 $6a^2 + 6a = 6b^2 - 6b$
 $6a^2 - 6b^2 = -6a - 6b$
 $a^2 - b^2 = -a - b$
 $(a - b)(a + b) = -(a + b)$
 $a - b = -1$

Cevap: B

9. $x + y = a \Rightarrow (x + y)^2 = a^2$
 $x^2 + y^2 + 2xy = a^2$
 $15 + 2 \cdot 5 = a^2$
 $25 = a^2$
 $a = 5$
 $\Rightarrow x + y = 5$
 $x^3 + y^3 = (x + y)^3 - 3xy(x + y)$
 $= 5^3 - 3 \cdot 5 \cdot 5$
 $= 125 - 75$
 $= 50$

Cevap: C

10. $\frac{\sqrt[3]{(-3)^2} - \sqrt[3]{(-2)^3}}{\sqrt[3]{4^3} - (\sqrt[3]{-2})^3} = \frac{|-3| - (-2)}{4 - (-2)}$
 $= \frac{3 + 2}{4 + 2} = \frac{5}{6}$

Cevap: E

11. • $\frac{x}{3 \cdot xy} + \frac{y}{2xy} = \frac{xy}{xy}$
 $\frac{1}{3y} + \frac{1}{2x} = 1$
 • $\frac{y}{4yz} + \frac{z}{2yz} = \frac{yz}{yz}$
 $\frac{1}{4z} + \frac{1}{2y} = 1$
 $\Rightarrow -\frac{1}{2} / \frac{1}{3y} + \frac{1}{2x} = 1 \rightarrow \frac{-1}{6y} - \frac{1}{4x} = -\frac{1}{2}$
 $\frac{1}{3} / \frac{1}{4z} + \frac{1}{2y} = 1 \rightarrow + \frac{1}{12z} + \frac{1}{6y} = \frac{1}{3}$

 $24. / \frac{1}{12z} - \frac{1}{4x} = \frac{-1}{6}$
 $\frac{2}{z} - \frac{6}{x} = -4$

Cevap: E

12. $x = 48$ $y = 3$
 $\Rightarrow \frac{x}{y} = \frac{48}{3} = 16$

Cevap: C

13. • $\frac{x+y-z}{x} = \frac{y-x+z}{y} = \frac{z+x-y}{z} = k$
 $\frac{x+y-z+y-x+z+z+x-y}{x+y+z} = k$
 $\frac{x+y+z}{x+y+z} = \boxed{k=1}$

• $\frac{x+y-z}{x} = 1 \rightarrow x+y-z=x$
 $y-z=0 \rightarrow y=z$

• $\frac{z+x-y}{z} = 1 \rightarrow z+x-y=z$
 $x-y=0 \rightarrow x=y$

$\Rightarrow \frac{x+3y}{z} = \frac{y+3y}{y} = 4$

Cevap: B

14. $ab = c + 8$
 $ac = b + 10$
 $c = 3 - b$

I. $ab = 3 - b + 8 = 11 - b$
 II. $a(3 - b) = b + 10$
 $3a - ab = b + 10$ (ab yerine yazılır.)
 $3a - (11 - b) = b + 10$
 $3a - 11 + b = b + 10$
 $3a = 21$
 $a = 7$ bulunur.

Cevap: D

15. $(f \circ g^{-1})(0) = f \circ g^{-1} \left(\frac{f(0)}{8} \right)$
 $= (f \circ g^{-1})(8)$
 $g(x) = x^3$
 $\Rightarrow g^{-1}(x^3) = x \stackrel{x=2}{\Rightarrow} g^{-1}(8) = 2$
 $= f(g^{-1}(8)) = f(2) = 0$
 \downarrow
 2

Cevap: A

16. $K = \frac{\sqrt{21}}{2} - \sqrt{16 - \frac{1}{4}} + \frac{\sqrt{112}}{8}$
 $K = \frac{\sqrt{21}}{2} - \sqrt{\frac{63}{4}} + \frac{\sqrt{112}}{8}$
 $K = \frac{\sqrt{21}}{2} - \frac{3\sqrt{7}}{2} + \frac{4\sqrt{7}}{8}$
 $K = \frac{\sqrt{21} - 3\sqrt{7} + \sqrt{7}}{2}$
 $K = \frac{\sqrt{21} - 2\sqrt{7}}{2}$ olur.
 $\frac{2K}{\sqrt{7}} = \frac{2 \cdot \frac{\sqrt{21} - 2\sqrt{7}}{2}}{\sqrt{7}} = \frac{\sqrt{7}(\sqrt{3} - 2)}{\sqrt{7}}$
 $= \sqrt{3} - 2$

Cevap: C

TASARI EĞİTİM YAYINLARI

17. $\frac{x^2 - 25y^2}{x^2 + y^2} \cdot \left(\frac{5x-y}{x^2 + 5xy} + \frac{5x+y}{x^2 - 5xy} \right)$
 $= \frac{(x-5y)(x+5y)}{x^2 + y^2} \cdot \left(\frac{5x-y}{x(x+5y)} + \frac{5x+y}{x(x-5y)} \right)$
 $= \frac{(x-5y) \cdot (x+5y)}{x^2 + y^2} \cdot \frac{(5x-y)(x-5y) + (5x+y) \cdot (x+5y)}{x \cdot (x-5y)(x+5y)}$
 $= \frac{5x^2 - 25xy - xy + 5y^2 + 5x^2 + 25xy + xy + 5y^2}{(x^2 + y^2) \cdot x}$
 $= \frac{10x^2 + 10y^2}{(x^2 + y^2) \cdot x} = \frac{10(x^2 + y^2)}{x \cdot (x + y^2)}$
 $= \frac{10}{x}$

Cevap: B

18. $16 \mid 15a + 16b = 42$
 $- 15 \mid 16a + 17b = 45$

 $240a + 256b = 672$
 $- 240a - 255b = -675$

 $b = -3$ bulunur.

Cevap: A

$$\begin{aligned}
 19. \quad & \frac{yx^2 - 4x^2 - 4x + yx - 6y + 24}{xy^2 + 3y^2 - 2yx - 6y - 8x - 24} + \frac{2}{y+2} \\
 &= \frac{x^2(y-4) - x(4-y) - 6(y-4)}{y^2(x+3) - 2y(x+3) - 8(x+3)} + \frac{2}{y+2} \\
 &= \frac{(y-4)(x^2 + x - 6)}{(x+3)(y^2 - 2y - 8)} + \frac{2}{y+2} \\
 &= \frac{(y-4)(x+3)(x-2)}{(x+3)(y-4)(y+2)} + \frac{2}{y+2} \\
 &= \frac{x-2}{y+2} + \frac{2}{y+2} = \frac{x}{y+2}
 \end{aligned}$$

Cevap: E

$$\begin{aligned}
 20. \quad & a - b = 30 \\
 & -1 / b + c = 14 \\
 & -1 / c - d = 12 \\
 \hline
 & a - b = 30 \\
 & -b - c = -14 \\
 + & -c + d = -12 \\
 \hline
 & a - 2b - 2c + d = 4 \text{ bulunur.}
 \end{aligned}$$

Cevap: D

$$\begin{aligned}
 21. \quad & \frac{7}{1+a^x} + \frac{1}{1+a^{-x}} = k \\
 & \frac{6}{1+a^x} + \frac{1}{1+a^x} + \frac{1}{1+\frac{1}{a^x}} = k \\
 & \frac{6}{1+a^x} + \frac{1}{1+a^x} + \frac{a^x}{a^x+1} = k \\
 & \frac{6}{1+a^x} + \frac{1+a^x}{1+a^x} = k \\
 & \frac{6}{1+a^x} = k-1 \\
 & \frac{13}{1+a^x} + \frac{1}{1+a^{-x}} = \frac{6}{1+a^x} + \frac{7}{1+a^x} + \frac{1}{1+a^{-x}} \\
 & \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \\
 & = k-1 \quad + \quad k \\
 & = 2k-1
 \end{aligned}$$

Cevap: D

$$\begin{aligned}
 22. \quad & \frac{a+b}{c+7} = \frac{b+3c}{4a} = 1 \\
 \text{I) } & a+b = c+7 \\
 & a+b-c = 7 \\
 & \downarrow \\
 & a+b+c = 21 \\
 -1 / & a+b-c = 7 \\
 \hline
 & 2c = 14 \\
 & c = 7 \\
 \text{II) } & b+3c = 4a \\
 & b+3c-4a = 0 \\
 & \downarrow \\
 & a+b+c = 21 \\
 & b+3c-4a = 0 \\
 \hline
 -1 / & a+b = 14 \\
 & b-4a = -21 \\
 \hline
 & -5a = -35 \\
 & a = 7
 \end{aligned}$$

Cevap: C

TASARI EĞİTİM YAYINLARI

$$\begin{aligned}
 23. \quad & x^3 \cdot P(x) = (a-2)x^4 + (b+1)x^3 + \underbrace{(2a-6)}_0 \cdot x^2 + \underbrace{b-4}_0 \\
 & 2a-6=0 \Rightarrow a=3 \text{ ve } b-4=0 \Rightarrow b=4 \\
 & \Rightarrow x^3 P(x) = x^4 + 5x^3 \\
 & x=1 \quad 1 \cdot P(1) = 1+5 \Rightarrow P(1) = 6
 \end{aligned}$$

Cevap: E

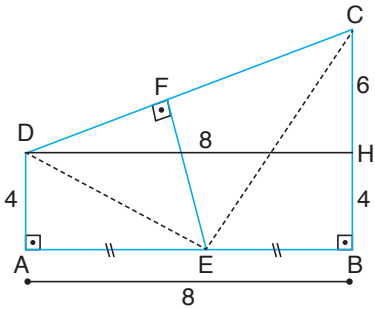
$$\begin{aligned}
 24. \quad & \frac{-x+20}{x^2-5x-6} = \frac{A}{x-6} + \frac{B}{x+1} \\
 & \frac{-x+20}{x^2-5x-6} = \frac{Ax+A+Bx-6B}{x^2-5x-6} \\
 & -x+20 = x(A+B) + A-6B \\
 \Rightarrow & \begin{array}{r} 6/ \quad A+B = -1 \\ + \quad A-6B = 20 \\ \hline 7A = 14 \Rightarrow A = 2 \end{array} \quad \longrightarrow \quad \begin{array}{r} 2+B = -1 \\ \boxed{B = -3} \end{array} \\
 \Rightarrow & A+B = 2+(-3) = -1
 \end{aligned}$$

Cevap: D

30. • $f(\sqrt{2}) = 17 \Rightarrow x = 2 \rightarrow f\left(\frac{2}{\sqrt{2}}\right) = a \cdot 2^2 + b$
 $f(\sqrt{2}) = 4a + b = 17$
 • $g(2) = 13 \Rightarrow x = \sqrt{2} \rightarrow g(\sqrt{2} \cdot \sqrt{2}) = b(\sqrt{2})^2 + a$
 $g(2) = 2b + a = 13$
- $$\begin{array}{r} 2/ \quad 4a + b = 17 \\ \quad - 2b + a = 13 \quad \rightarrow \quad 2b + 3 = 13 \\ \hline \quad 7a = 34 - 13 \quad \quad 2b = 10 \\ \quad 7a = 21 \quad \quad \quad b = 5 \\ \quad a = 3 \end{array}$$
- $\Rightarrow f\left(\frac{x}{\sqrt{2}}\right) = 3x^2 + 5 \xrightarrow{x=0} f(0) = 0 + 5 = 5$
 $\Rightarrow g(x\sqrt{2}) = 5x^2 + 3 \xrightarrow{x=0} g(0) = 0 + 3 = 3$
 $\Rightarrow f(0) + g(0) = 8$ olur.

Cevap: C

31.



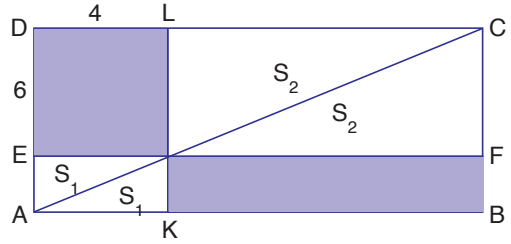
DHC üçgeninde $|DC|^2 = |DH|^2 + |HC|^2$
 $|DC|^2 = 8^2 + 6^2$
 $|DC|^2 = 64 + 36 = 100$
 $|DC| = 10$ br

$A(ABCD) = |CD| \cdot |EF|$
 $\frac{(4 + 10) \cdot 8}{2} = 10 \cdot |EF|$

$|EF| = 5,6$ br

Cevap: E

32.



$A(ABC) = A(ADC)$

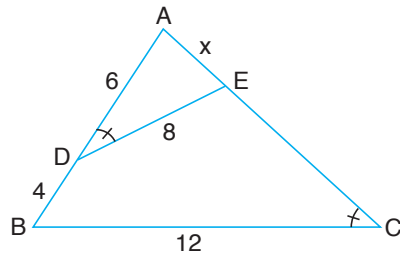
$A(AKP) = A(AEP) = S_1$

$A(PFC) = A(PLC) = S_2$

Dolayısıyla $A(KBFP) = A(EPLD)$ olur.
 $= 6.4$
 $= 24 \text{ cm}^2$ olur.

Cevap: D

33.



$\widehat{ADE} \sim \widehat{ACB}$ (Açı, Açı)

$m(\widehat{A}) = m(\widehat{A})$ ortak

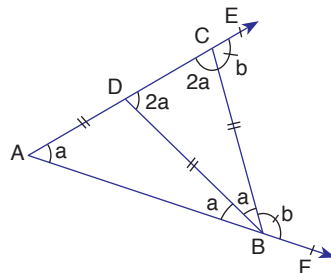
$m(\widehat{ADE}) = m(\widehat{C})$ eş

$\frac{|AE|}{|AB|} = \frac{|DE|}{|CB|} \Rightarrow \frac{x}{10} = \frac{8}{12}$

$x = \frac{20}{3}$ bulunur.

Cevap: B

34.



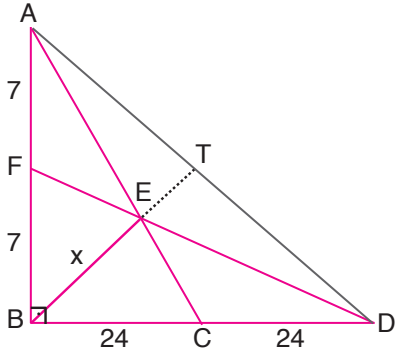
$2a + b = 180$ ise
 $m(\widehat{DBC}) = a$ olur.

$5a = 180$

$a = 36$

Cevap: B

35.



E noktası 2 tane kenarortayın kesin noktası olduğu için üçüncü kenarortay yine E noktasından geçmeli. Yani $|BT|$ kenarortay olur. Buradan E noktasının ağırlık merkezi olduğu görülür. $7 - 24 - 25$ üçgeninden $|AD| = 50$

Muhteşem üçlünden $|AT| = |TD| = |BT| = 25$

E noktası ağırlık merkezi olduğu için $|ET| = k$ olup, $|BE| = 2k$ olur.

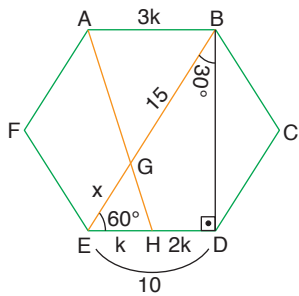
$$3k = 25$$

$$k = \frac{25}{3}$$

$$|BE| = x = 2k = \frac{50}{3}$$

Cevap: D

36.

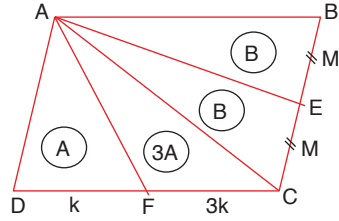


$$\frac{3k}{k} = \frac{15}{x} \Rightarrow x = 5$$

Çevresi $6 \cdot 10 = 60$ birim yapar.

Cevap: B

37.



$$4A = 2B$$

$$2A = B$$

$$A + B = 15$$

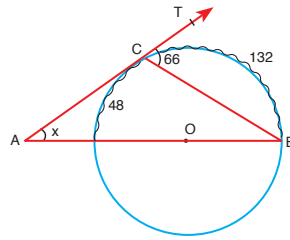
$$\Rightarrow 3A = 15$$

$$\boxed{A = 5} \Rightarrow \boxed{B = 10}$$

$$A(AFCE) = 3A + B = 15 + 10 = 25$$

Cevap: A

38.



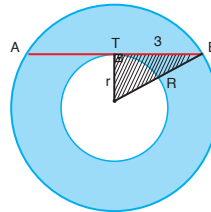
$$x = \frac{132 - 48}{2}$$

$$x = \frac{84}{2} = 42^\circ$$

Cevap: C

TASARI EĞİTİM YAYINLARI

39.



$$\begin{aligned} \text{Taralın alan} &= \pi \cdot (R^2 - r^2) \\ &= 9\pi \end{aligned}$$

Cevap: B

40.

$$\frac{2 \cdot 2}{2} + \frac{1 \cdot 2}{2} + \frac{1 \cdot 2}{2} + \frac{2 \cdot 2}{2}$$

$$= 2 + 1 + 1 + 2 = 6$$

Cevap: B

41. $A = 7$, $R = 5$, $B = 4$
 $C = 6$, $M = 8$, $P = 1$
- 7 5 7 4 7 → ARABA
 7 6 7 4 7 → ACABA
 5 7 8 1 7 → RAMP A
 8 7 5 7 3 → MARAZ

Cevap: E

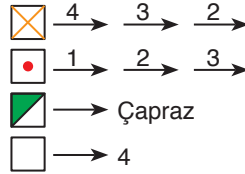
44. $K = 30$
- $$\begin{array}{r} a \cdot 6 \cdot b = 30 \\ \downarrow \downarrow \\ 5 \quad 1 \end{array} \quad \begin{array}{r} a \cdot 3 \cdot c = 30 \\ \downarrow \downarrow \\ 5 \quad 2 \end{array}$$
- $$\begin{array}{r} c \cdot 1 \cdot d = 30 \\ \downarrow \\ 2 \end{array} \quad \begin{array}{r} b \cdot 5 \cdot e = 30 \\ \downarrow \downarrow \\ 1 \quad 6 \end{array}$$
- $d = 15$
 $a = 5$, $b = 1$, $c = 2$, $d = 15$, $e = 6$
 $a + b - c + d = 5 + 1 - 2 + 15 = 19$

Cevap: E

42. 485621 \xrightarrow{x} 846512 \xrightarrow{y} 651284 \xrightarrow{z} 681254

Cevap: B

45.



Cevap: A

43.

+	a	b	c
a		49	
b			44
c	37		

Tablodan

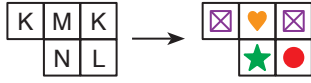
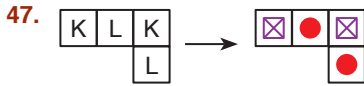
$$\begin{cases} a + b = 49 \\ b + c = 44 \\ a + c = 37 \end{cases}$$

$$\begin{array}{r} a + b = 49 \\ + \quad -b - c = -44 \\ \hline a - c = 5 \end{array}$$

Cevap: C

46. $a + b = 4c$
 $a = b + c$
 $2b = 3c$ $a = 5c$
 $\downarrow \quad \downarrow$
 $3k \quad 2k$
 $c + 2a = ?$
 $2k + 10k = 12k$ aradığımız
 C) $\triangle \triangle \triangle \triangle = 4b = 4 \cdot 3k = 12k$

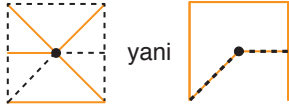
Cevap: C



M → ♥

N → ★

Cevap: E



Cevap: E

49. I. _____
Bir dilim → iki dilim → üç dilim
- II. _____
İki dilim → üç dilim → dört dilim
- III. _____
?
- Üç dilim → dört dilim → beş dilim



Cevap: B

50.
$$\begin{array}{r} K \rightarrow 6 \\ L \rightarrow 4 \\ M \rightarrow 2 \\ + N \rightarrow 8 \\ \hline 20 \end{array}$$

$$\frac{360^\circ}{20} = 18^\circ$$

$$K \rightarrow 6.18 = 108^\circ$$

$$L \rightarrow 4.18 = 72^\circ$$

$$M \rightarrow 2.18 = 36^\circ$$

$$N \rightarrow 8.18 = 144$$

Cevap: D

51.
$$\alpha = \left| \frac{11.dk - 60.saat}{2} \right|$$

$$\alpha = \left| \frac{11.42 - 60.3}{2} \right|$$

$$\alpha = \left| \frac{462 - 180}{2} \right|$$

$$\alpha = 141^\circ$$

Cevap: B

52. $\Sigma \rightarrow x$, $\Pi \rightarrow y$, $\emptyset \rightarrow z$

$$\begin{cases} 2x + 3y + z = 25 \\ 4x + y - z = 19 \\ x + y + z = 11 \end{cases}$$

$$\begin{array}{r} 6x + 4y = 44 \\ -2/ \quad 5x + 2y = 30 \\ \hline \end{array}$$

$$-4x = -16$$

$$x = 4, \quad y = 5, \quad z = 2$$

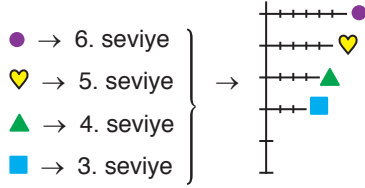
olur.

O halde ? = $\Pi \Pi$

$$x + 2y + 3z = 20$$

Cevap: B

53. Bulunduğu seviye kadar sağa doğru



54. ● → (-) fark

* → (x) çarpma

△ → (+) toplam

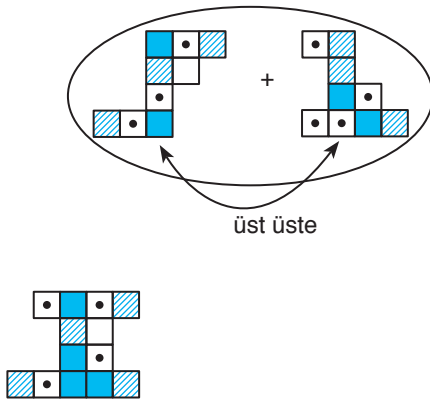
$$(21 \bullet 27) + (4 * 3) - (12 \triangle 5)$$

$$\downarrow \quad \quad \downarrow \quad \quad \downarrow$$

$$6 \quad + \quad 12 \quad - \quad 17 \quad = 1$$

55. Üst üste konulmakta

baskın renk ön plana çıkmakta

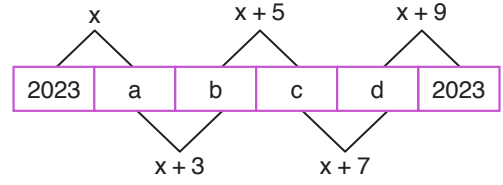


Cevap: A

Cevap: A

Cevap: E

56. Kural gereği



$$x = 2023 + a$$

$$a + b = x + 3 \Rightarrow b = 2026$$

$$b + c = x + 5 \Rightarrow 2026 + c = a + 2023 + 5 \Rightarrow c = a + 2$$

$$c + d = x + 7 \Rightarrow a + 2 + d = 2023 + a + 7 \Rightarrow d = 2028$$

$$d + 2023 = x + 9 \Rightarrow 2028 + 2023 = x + 9$$

$$4042 = x \text{ bulunur.}$$

Cevap: C

57.

●	◆	∅	▲	⇒	♥	Π
◆	Π	◆	▲	♥	∅	⇒
∅	▲	♥	∅	⇒	Π	◆
▲	∅	Π	⇒	▲	◆	♥
⇒	◆	⇒	♥	∅	▲	Π
♥	♥	▲	Π	◆	⇒	∅
Π	⇒	∅	◆	Π	♥	▲


$$[(\Rightarrow \bullet \heartsuit) \bullet \emptyset] \bullet (\blacktriangle \blacklozenge)$$


$$= (\blacktriangle \bullet \emptyset) \bullet \emptyset$$


$$= \Pi \bullet \emptyset$$

$$= \emptyset$$

Cevap: D




58.  B A T 1 → B T A 1
↕
yer değiştiriyor



 K E 5 L → 5 L K E
↻

M E R T  M R E T  E T M R  T E R M

E L 7 K  E 7 L K  7 E K L
↕ ↕ ↕

Cevap: A

59.  →  →  A
↙ ↘
Köşe şekiller yer değiştiriyor.

 →  B
↙ ↘
Şekil 90° sola döndürülüyor.

Cevap: C

60. I. (Kare içinin çarpımı) – (Üçgen içinin çarpımı)
= (2.3.4.5) – (12.8)
= 120 – 96
= 24

II. (1.7.2.4) – (15.5)
= 56 – 75
= -19

III. (3.6.4.4) – (9.10)
= 288 – 90
= 198

IV. (5.2.4.6) – (11.9)
= 240 – 99
= 141

Cevap: B

61.

+	a	b	c
a			
b			28
c			

x	a	b	c
a		108	
b			
c	144		

I. tablodan $b + c = 28$ II. tablodan $a.b = 108$

$$+ \quad a.c = 144$$

$$a(b + c) = 252$$

$$28$$

$$a = 9$$

Cevap: C

62. $3 \blacksquare 2 = (3 \bullet 2) \cdot (2 \blacktriangle 3)$

$$3 \bullet 2 = \frac{3 \cdot 2}{3 + 2} = \frac{6}{5}$$

$$2 \blacktriangle 3 = \frac{(2 - 3)^2}{2 + 3} = 5$$

$$3 \blacksquare 2 = \frac{6}{5} \cdot 5 = 6$$

Cevap: C

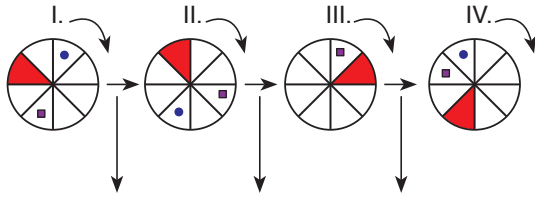


Cevap: B

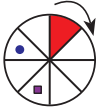


Cevap: A

65.



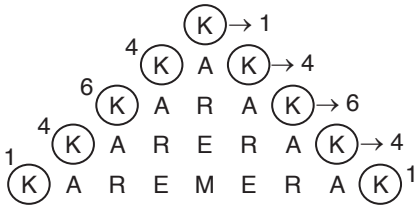
Siyah dilim 1 ileri Siyah dilim 2 ileri Siyah dilim 3 ileri
 Siyah nokta 4 ileri Siyah nokta 5 ileri Siyah nokta 6 ileri
 Beyaz nokta 2 geri Beyaz nokta 2 geri Beyaz nokta 2 geri



Siyah dilim 4 ileri
 Siyah nokta 7 ileri
 Beyaz nokta 2 ileri

Cevap: C

66.



Toplamda 31 tane MERAĞ vardır.

Şunu da görebiliriz.

$$3 \xrightarrow{+4} 7 \xrightarrow{+8} 15 \xrightarrow{+16} 31$$

Cevap: B

67. 1. ve 2. şekillerdeki düzenlemeden şeklimiz



Cevap: A

68.

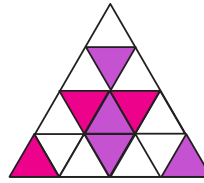
yansı	24	72	48	144	120	→ y = 30
	12	36	24	72	60	
	6	18	12	36	(y)	
	3	(x)	6	18	15	
						↓ x = 9

9,30 olmalı.

Cevap: B

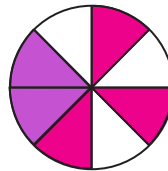
TASARI EĞİTİM YAYINLARI

69.



$$\rightarrow \frac{9^2 - 3^3 + 4^2}{16 - (9 + 4 - 3)}$$

$$= \frac{81 - 27 + 16}{16 - 10} = \frac{70}{6} = \frac{35}{3}$$



$$\rightarrow \frac{3^2 - 3^3 + 2^2}{8 - (3 + 2 - 3)} = \frac{9 - 27 + 4}{8 - 2}$$

$$= -\frac{14}{6}$$

$$= -\frac{7}{3}$$

Cevap: A

70. $x_1 \dots x_3 \dots x_5 \dots x_7 \dots x_{21}$
 4 7 10 13
 A =
- $x_2 \dots x_4 \dots x_6 \dots x_8 \dots x_{32}$
 5 7 9 11
 B =
- $3a + 1$ formülü kullanılırsa
 $a = 1 \rightarrow 4$
 $a = 2 \rightarrow 7$
- x_{21} terim olarak $\frac{21-1}{2} + 1 = 11$. terim
- $a = 11 \rightarrow 3 \cdot 11 + 1 = 34$ bulunur A
 $2y + 3$ formülü kullanılırsa
 $y = 1 \rightarrow 5$
 $y = 2 \rightarrow 7$
- x_{32} terim olarak $\frac{32-2}{2} + 1 = 16$.
- $y = 16$ için $2 \cdot 16 + 3 = 35$ bulunur B
 $A + B = 34 + 35$
 $= 69$

Cevap: D

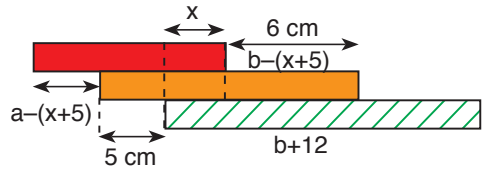
71. Şekildeki küp kapatıldığında karşılıklı olacak sayılar;

1 $\xrightarrow{\text{karşısı}}$ 3
 2 \rightarrow 6
 4 \rightarrow 5 olmalı.

A, C, D ve E seçeneklerinde bu bozulmuş doğru seçenek (B)

Cevap: B

72.



$$b - (x + 5) = 6 \Rightarrow b - x - 5 = 6$$

$$b - x = 11$$

$$a - (x + 5) + 5 + b + 12 = 40$$

$$a - x - 5 + 5 + b + 12 = 40$$

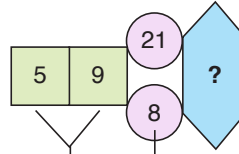
$$11$$

$$a + 23 = 40$$

$$a = 17 \text{ bulunur.}$$

Cevap: C

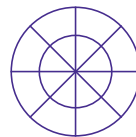
73.



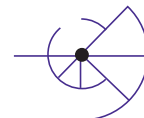
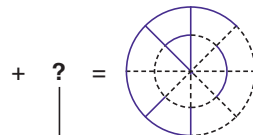
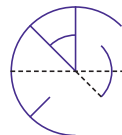
$$5 \cdot 9 - (21 + 8) = 45 - 29 = 16 \text{ bulunur.}$$

Cevap: A

74. Şeklimiz tamamlandığında;



şeklinde olmalı.



Cevap: A

75. Şekle göre;

$$a^2 - c^2 = 5, \quad a.b = 18 \quad b.c = N$$

$$\frac{d + a^2}{2} = 5, \quad a^2 + b^2 + c^2 + d^2 = 50$$

$$\Rightarrow d + a^2 = 10$$

$$a.b = 18 \\ \downarrow \downarrow \\ 3 \ 6$$

$$a = 3 \text{ olursa, } 9 - c^2 = 5 \Rightarrow c = 2 \text{ bulunur.}$$

$$d + g = 10 \Rightarrow d = 1 \text{ olur.}$$

$$a^2 + b^2 + c^2 + d^2 = 3^2 + 6^2 + 2^2 + 1 = 9 + 36 + 4 + 1 = 50$$

$$\text{O halde } N = b.c = 6.2 = 12$$

Cevap: A

76. $6 \xrightarrow{4} x = \frac{4^6}{6.4} = \frac{4^6}{24}$

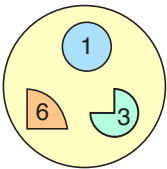
$$3 \xrightarrow{8} y = \frac{8^3}{3.8} = \frac{8^3}{24}$$

$$\frac{x}{y} = \frac{\frac{4^6}{24}}{\frac{8^3}{24}} = \frac{2^{12}}{2^9} = \frac{24}{2^9}$$

$$= 2^3 = 8 \text{ bulunur.}$$

Cevap: C

77.



$$\begin{aligned} &\rightarrow 8(8.1 + 2.6 + 6.3) \\ &= 8(8 + 12 + 18) \\ &= 8.38 \\ &= 304 \text{ bulunur.} \end{aligned}$$

Cevap: E

78. i) Daire içi değerler toplanıp 3'e bölünüp kare içine yazılıyor. Sağlı sollu kareler toplanıp 2'ye bölünüp üçgen içine yazılıyor.

$$A = \frac{7+3}{2} = 5$$

$$B = \frac{7+12+8}{3} = 9$$

$$C \Rightarrow 3 = \frac{1+2+C}{3} \Rightarrow C = 9 - 3 = 6$$

Cevap: A

79. 1. şekil; Sol toplam $5 + 2 + 3 = 10$
dik toplam $6 + 2 + 4 = 12$
bunların çarpımı $10 \times 12 = 120$

2. şekil; sol toplam $11 - 5 + 6 = 12$
dik toplam $4 - 5 + 9 = 8$
 $12 \times 8 = 96$

O halde

IV. şekil; sol toplam $2 + 11 + 1 = 14$
dik toplam $-3 + 11 + 6 = 14$
 $14 \times 14 = 196$

Cevap: B

169	069	689	889	?	989
↓	↓	↓	↓	↓	↓
691	690	689	688	687	686

Verilen sayılardan büyükten küçüğe ardışık sayılar oluşturulmuş.

Cevap: A