

ÇÖZÜMLERİ

1. $abc \blacksquare \rightarrow (a + c)b$

$abc \bullet \rightarrow (a.c)b$

$(624 \bullet) \blacksquare \rightarrow 242 \blacksquare = 44$

Cevap: B

2. $(2 + 3 + 4)^2 = 81$

$(1 + 2 + 3)^2 = 36$

$(0 + 2 + 3)^2 = ? = 25$

Cevap: D

3. $\bullet = 2k \quad \blacksquare = 3k \quad \blacktriangle = 7k$

$\Rightarrow \blacktriangle = 7k = \bullet \bullet \blacksquare$

Cevap: A

4. $\bullet = 4 \quad \oplus = 5 \quad \blacktriangle = 6 \quad \boxplus = 7 \quad \triangle = 8 \quad \blacksquare = 9$

$\Rightarrow \bullet \blacktriangle \blacksquare = 469$

Cevap: B

5. $\blacksquare = 2 \quad \blacktriangle = 3 \quad \bullet = 4 \quad \circ = 6 \quad \triangle = 7 \quad \blacksquare = 8$

$\Rightarrow \blacktriangle \circ \blacksquare \blacksquare = 3628$

Cevap: A

6. $6r \quad 360$

$24r \quad ? \rightarrow$ ters orantı

$\text{ör. } 360 = ? \cdot 24r \Rightarrow 90^\circ = ?$

Ortadaki 90° saat yönünde tersi

$6r \quad 360$

$36r \quad ? \rightarrow \text{ör. } \frac{360}{60} = ? \cdot \frac{36r}{6} \Rightarrow 60^\circ = ?$

Büyük olan 60° saat yönü döner.

Cevap: B

7. $\left| \frac{11 \cdot \text{dakika} - 60 \text{ saat}}{2} \right|$ Formülü ile bulunur.

$\left| \frac{11 \cdot 13 - 60 \cdot 7}{2} \right| = \left| \frac{143 - 420}{2} \right| = 138,5$

Cevap: B

8. $2a = 8 \Rightarrow a = 4, b = 4$

$\frac{3}{8 \oplus 4} = \frac{4}{2} - 4 : 4 \Rightarrow \frac{3}{8 \oplus 4} = 2 - 1 \Rightarrow \frac{3}{8 \oplus 4} = 1$

$\Rightarrow 8 \oplus 4 = 3$

Cevap: B

9. $L = \Pi, P = \emptyset, T = \boxtimes$

Cevap: C

10. $3.d = 18 \Rightarrow d = 6$

$$c^d = 1 \Rightarrow c^6 = 1 \Rightarrow c = 1$$

$$b - c = 4 \Rightarrow b - 1 = 4 \Rightarrow b = 5$$

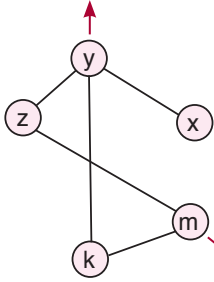
$$\frac{b+c}{d} = \frac{5+1}{6} = 1$$

Cevap: C

11. $4, 5, 10, 6, 7, 14, 10, 11, 22, 18, 19, 38, ?$
 $\underbrace{+1 \times 2 - 4}_{+1 \times 2 - 4} \underbrace{+1 \times 2 - 4}_{+1 \times 2 - 4} \underbrace{+1 \times 2 - 4}_{+1 \times 2 - 4}$

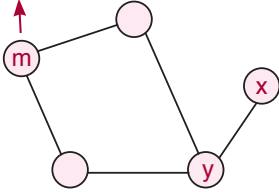
Cevap: A

12. x, z ve k ile bağlı



y ile bağlı değil

y ile bağlı değil



$$\Rightarrow a = m$$

$$b = y$$

Cevap: E

13. I. $5.2 + 4 - 7 = 7$

II. $7.2 + 4 - 5 = 13$

III. $4.2 + 5 - 7 = 6$

\Rightarrow IV. $8.2 + 6 - 2 = 16 + 6 - 2 = 20$

Cevap: D

14. I. $3^2 + \sqrt{49} = 9 + 7 = 16$

II. $2^2 + \sqrt{25} = 4 + 5 = 9$

III. $2^2 + \sqrt{36} = 4 + 6 = 10$

IV. $3^2 + \sqrt{100} = 9 + 10 = 19$

Cevap: A

15. I. $(10 + 8):2 = 9$

II. $(7 + 3):2 = 5$

III. $(8 + 6):2 = 7$

IV. $(11 + 1):2 = 6$

Cevap: D

16. $20 + 5 - 1 = 24$

$10 + 3 - 2 = 11$

$8 + 6 - 2 = 12$

$12 + 4 - 3 = 13$

Cevap: C

17. $\left. \begin{array}{l} a + b = 3k - 1 \\ b + a = 2k + 5 \end{array} \right\} \Rightarrow 3k - 1 = 2k + 5 \Rightarrow k = 6$

$\Rightarrow c + c = 4k + 2 \Rightarrow 2c = 4k + 2 \Rightarrow 2c = 26 \Rightarrow c = 13$

Cevap: E

18. $a^2 = 5k, c^2 = 20k \Rightarrow a^2 \cdot c^2 = 100k^2 \Rightarrow a \cdot c = 10k$

$\Rightarrow a \cdot c = \frac{k^2}{2} = 10k \Rightarrow k^2 = 20k \Rightarrow k = 20$

$\Rightarrow b^2 = 2k + 9 = 49 \Rightarrow b = 7$

Cevap: D

19. $a + a = k + 1 \Rightarrow 2a = k + 1 \Rightarrow a = \frac{k+1}{2}$
 $b + b = 4k + 2 \Rightarrow 2b = 4k + 2 \Rightarrow b = 2k + 1$
 $\Rightarrow a \cdot b = 7k + 11 = \frac{k+1}{2} \cdot (2k + 1)$
 $\Rightarrow 7k + 11 = \frac{2k^2 + 3k + 1}{2} \Rightarrow 2k^2 + 3k + 1 = 14k + 22$
 $\Rightarrow 2k^2 - 11k - 21 = 0 \Rightarrow (2k + 3)(k - 7) = 0$
 $\Rightarrow k = -\frac{3}{2}, k = 7$
 $\Rightarrow k = 7$

Cevap: B

20. $d = 2, c - d = 5 \Rightarrow c = 7$
 $a^2 + c = 43 \Rightarrow a^2 = 36 \Rightarrow a = 6$
 $d = 2, b^2 + d = 3 \Rightarrow b = 1$
 $T = a - b = 6 - 1 = 5$

Cevap: A

21. $a - b = 1, c - d = 1 \Rightarrow b = a - 1, d = c - 1$
 $a^2 + c = 32 \Rightarrow c = 32 - a^2$
 $b^2 + d = (a - 1)^2 + c - 1 = 24c = 25 - (a - 1)^2$
 $\Rightarrow 32 - a^2 = 25 - (a - 1)^2 \Rightarrow 32 - a^2 = 25 - a^2 + 2a - 1$
 $\Rightarrow 32 - 25 + 1 = -a^2 + 2a + a^2 \Rightarrow 8 = 2a \Rightarrow a = 4$

Cevap: B

22. $[(\star \heartsuit \heartsuit) \heartsuit (\heartsuit \heartsuit \heartsuit)] + [(\heartsuit \heartsuit \heartsuit) \heartsuit (\heartsuit \heartsuit \heartsuit)] = ?$
 $\heartsuit = \heartsuit, \star = \heartsuit$

Cevap: B



Cevap: A

24. $7 + 8 + 6 + 9 = 30$

$$\begin{array}{r} 360^\circ \quad 30 \\ \alpha \quad \times \quad 7 \\ \hline \alpha = 84 \end{array}$$

$$\begin{array}{r} 360^\circ \quad 30 \\ \beta \quad \times \quad 8 \\ \hline \beta = 96 \end{array}$$

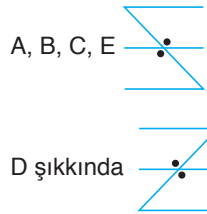
$$\begin{array}{r} 360^\circ \quad 30 \\ \theta \quad \times \quad 6 \\ \hline \theta = 72 \end{array}$$

$$\begin{array}{r} 360^\circ \quad 30 \\ \gamma \quad \times \quad 9 \\ \hline \gamma = 108 \end{array}$$

Cevap: E

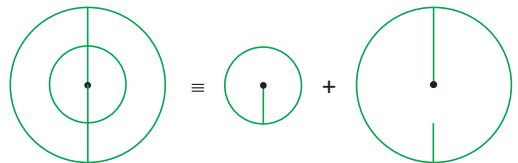
TASARI EĞİTİM YAYINLARI

25. A, B, C, E şıklarında var.



Cevap: D

26.



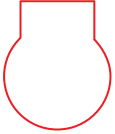
Cevap: E

27.



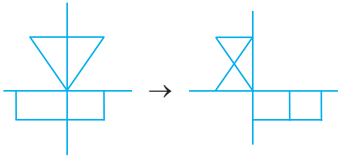
Cevap: B

28.



Cevap: B

29.



Cevap: B

$$30. 32 + \textcircled{8} = 40$$

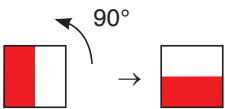
$$\frac{40}{\textcircled{5}} = 8$$

$(8 + \textcircled{1})2 = 81$ şeklinde sağdan sola gidiyor.

$$A = 8 \quad B = 35 \quad C = 20$$

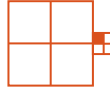
Cevap: B

31.



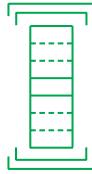
Cevap: D

32.



Cevap: B

33.



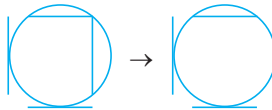
Cevap: D

34.



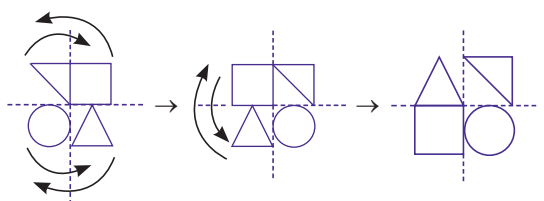
Cevap: E

35.



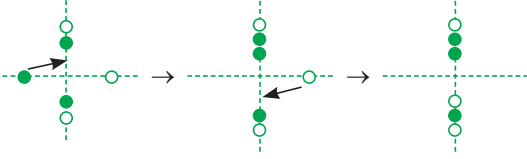
Cevap: C

36.



Cevap: C

37.

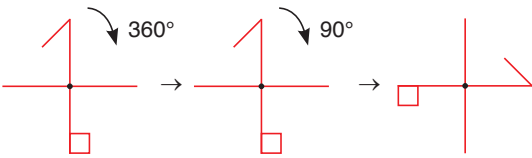


Cevap: A

38. $534 \rightarrow (5 - 4) + 3 = 4$
 $362 \rightarrow (3 - 2) + 6 = 7$
 $792 \rightarrow (7 - 2) + 9 = 14$
 $235 \rightarrow (3 - 2) + 5 = 6$
 $493 \rightarrow (9 - 4) + 3 = 8$
 $335 \rightarrow (3 - 3) + 5 = 5$
 $14 - 5 = 9$ olur.

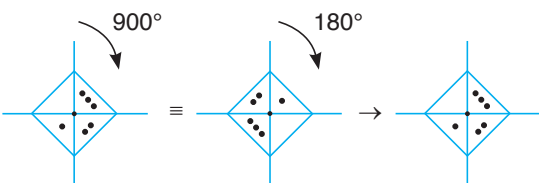
Cevap: C

39.



Cevap: A

40.



Cevap: D

$$41. A + B + C = 21, A + C = 17 \Rightarrow B = 4$$

$$\begin{array}{r} ABC \\ + CBA \\ \hline 1797 \end{array}$$

Cevap: B

$$42. \frac{7^{\cancel{46}}(1 + 2 \cdot 7 + 7^2)}{7^{\cancel{46}}(1 - 7 + 7^2)} = \frac{64}{43}$$

Cevap: C

$$43. 2^{x+1} = 2^x \cdot 2 = 3 \Rightarrow 2^x = \frac{3}{2}$$

$$\Rightarrow 4^{x-1} = \frac{4^x}{4} = \frac{(2^x)^2}{4} = \frac{\frac{9}{4}}{4} = \frac{9}{16}$$

Cevap: B

$$44. x^6 - 1 = (x^3 + 1)(x^3 - 1)$$

$$\frac{x^6 - 1}{x^3 + 1} = \frac{(x^3 + 1)(x^3 - 1)}{x^3 + 1} = x^3 - 1 = \frac{19}{8}$$

$$\Rightarrow x^3 = \frac{19}{8} + 1$$

$$\Rightarrow x^3 = \frac{27}{8} \Rightarrow x = \frac{3}{2}$$

Cevap: D

$$45. 2^5 = 32 = a$$

$$\Rightarrow \frac{(2^5)^2 + 32 + 1}{(2^5)^3 - 1} = \frac{a^2 + a + 1}{a^3 - 1}$$

$$= \frac{a^2 + a + 1}{(a - 1)(a^2 + a + 1)} = \frac{1}{a - 1} = \frac{1}{31}$$

Cevap: E

$$\begin{aligned}
46. & (\sqrt{5}-2)^{18} \cdot (\sqrt{5}-2)^{18} \cdot (\sqrt{5}-2)^1 \\
& (\sqrt{5}-2)^{18} \cdot (\sqrt{5}-2)^{18} \cdot (\sqrt{5}+2)^{18} \\
& \Rightarrow (\sqrt{5}-2)[(\sqrt{5}-2) \cdot (\sqrt{5}+2)]^{18} = (\sqrt{5}-2) \cdot 1 \\
& \Rightarrow \sqrt{5}-2 + \sqrt{5}+2 = 2\sqrt{5}
\end{aligned}$$

Cevap: D

$$\begin{aligned}
47. & x_1 + x_2 = 4 \quad x_1 \cdot x_2 = 2 \\
& x_1^2 + 2x_1 \cdot x_2 + x_2^2 = 16 \Rightarrow x_1^2 + 4 + x_2^2 = 16 \\
& \Rightarrow x_1^2 + x_2^2 = 12
\end{aligned}$$

Cevap: A

$$\begin{aligned}
48. & x^2 - 5x + 1 = 2 \Rightarrow x^2 - 5x - 1 = 0 \\
& x_1 + x_2 = 5 \quad x_1 \cdot x_2 = -1 \\
& \Rightarrow \frac{1}{x_1} + \frac{1}{x_2} = \frac{x_1 + x_2}{x_1 \cdot x_2} = \frac{5}{-1} = -5
\end{aligned}$$

Cevap: B

$$\begin{aligned}
49. & \frac{6}{-1 + \frac{8}{x-2}} = 2 \Rightarrow -1 + \frac{8}{x-2} = 3 \Rightarrow \frac{8}{x-2} = 4 \\
& \Rightarrow x-2 = 2 \Rightarrow x = 4
\end{aligned}$$

Cevap: A

$$\begin{aligned}
50. & \frac{a-1}{2} = k \Rightarrow a = 2k + 1 \\
& \frac{b+1}{3} = k \Rightarrow b = 3k - 1 \\
& \frac{c-2}{4} = k \Rightarrow c = 4k + 2 \\
& a + b + c = 9k + 2 = 8 \Rightarrow k = \frac{6}{9} = \frac{2}{3} \\
& \Rightarrow a = 2 \cdot \frac{2}{3} + 1 = \frac{4}{3} + 1 = \frac{7}{3}
\end{aligned}$$

Cevap: E

$$\begin{aligned}
51. & x^2 + x + y^2 - y = -\frac{1}{2} \\
& \Rightarrow x^2 + x + y^2 - y + \frac{1}{2} = 0 \\
& \Rightarrow x^2 + x + \frac{1}{4} + y^2 - y + \frac{1}{4} = 0 \\
& \Rightarrow \left(x + \frac{1}{2}\right)^2 + \left(y - \frac{1}{2}\right)^2 = 0 \Rightarrow x = -\frac{1}{2}, y = \frac{1}{2} \\
& \Rightarrow x - y = -\frac{1}{2} - \frac{1}{2} = -\frac{2}{2} = -1
\end{aligned}$$

Cevap: C

$$\begin{aligned}
52. & f^{-1}(k) = 7 \Rightarrow f(7) = k \Rightarrow 2x + 3 = 7 \Rightarrow 2x = 4 \\
& \Rightarrow x = 2 \Rightarrow f(7) = 3 \cdot 2 + 2 = 8
\end{aligned}$$

Cevap: C

$$\begin{aligned}
53. & x = 3 \Rightarrow g(4) = 3 \cdot 3 - 1 = 9 \\
& x = 11 \Rightarrow f(8) = 2 \cdot 11 + 1 = 23 \\
& \Rightarrow (f \circ g)(4) = f(g(4)) = 23
\end{aligned}$$

Cevap: E

$$\begin{aligned}
54. & f(x) = 3x + 4, f(g(x)) = 3 \cdot g(x) + 4 = 4x + 4 \\
& \Rightarrow 3 \cdot g(x) = 4x \Rightarrow g(x) = \frac{4x}{3} \Rightarrow g(1) = \frac{4}{3}
\end{aligned}$$

Cevap: D

$$55. \quad \begin{array}{ccc} \text{1.vagon} & \text{2.vagon} & \text{3.vagon} \\ x & y & z \end{array}$$

$$\begin{array}{ccc} 1. & x-7 & y+7 & z \\ 2. & x-7 & y-6 & z+13 \end{array}$$

$$\frac{90}{3} = 30$$

$$x-7 = 30 \Rightarrow x = 37$$

$$y-6 = 30 \Rightarrow y = 36$$

Cevap: E

56. x kişi olsun grupta yaşlar toplamı 312 ise 2 önceki yaşları toplamı her kişi 2 yaş gençleşeceği için 2x azalır.

312 - 2x olur. Ortalamasını bulmak için kişi sayısına bölmeliyiz.

$$\frac{312 - 2x}{x} = 11 \Rightarrow x = 24$$

Cevap: A

57. Pantolon fiyatı $\rightarrow 200x$ ise

Gömlek fiyatı $\rightarrow 100x$ ise

Pantolon %20 kâr ile satılırsa

$$200x + \frac{200x \cdot 20}{100} = 240x$$

Gömlek fiyatı %10 zararlar satılırsa

$$100x + \frac{100x \cdot 20}{100} = 90x$$

Pantolon + Gömlek = 300x

Yeni durumda Pantolon + Gömlek = 330x

30x kâr

$$\frac{3800x \cdot t}{100} = 30x \Rightarrow 3t = 30 \Rightarrow t = 10$$

% 10 kâr olur.

Cevap: E

$$58. \quad \frac{\sqrt{45}}{\frac{1}{\sqrt{5}} + \frac{1}{\sqrt{20}}} = \frac{\sqrt{5 \cdot 9}}{\frac{1}{\sqrt{5}} + \frac{1}{\sqrt{4 \cdot 5}}}$$

$$= \frac{3\sqrt{5}}{\frac{1}{\sqrt{5}} + \frac{1}{2\sqrt{5}}} = \frac{3\sqrt{5}}{\frac{2}{2\sqrt{5}} + \frac{1}{2\sqrt{5}}}$$

$$= \frac{3\sqrt{5}}{\frac{3}{2\sqrt{5}}}$$

$$= 3\sqrt{5} \cdot \frac{2\sqrt{5}}{3}$$

$$= 10 \text{ bulunur.}$$

Cevap: E

$$59. \quad a + b = 4c$$

$$a \cdot c = 15$$

$$+ \quad c \cdot b = 10$$

$$c(a + b) = 25$$

$$4c^2 = 25$$

$$c^2 = \frac{25}{4}$$

$$c = \pm \frac{5}{2} \text{ ve } c \in \mathbb{Z}^+$$

$$c = \frac{5}{2} \text{ olur.}$$

$$I. \quad a \cdot \frac{5}{2} = 15 \Rightarrow a = 6$$

$$II. \quad \frac{5}{2} \cdot b = 10 \Rightarrow b = 4$$

O halde

$$a + b + c = 6 + 4 + \frac{5}{2}$$

$$= \frac{25}{2} \text{ bulunur.}$$

Cevap: B

$$60. \quad \left(\frac{4}{1 - \frac{4}{5}} + \frac{\frac{4}{5} - 1}{4} \right) : \frac{1}{20}$$

$$= \left(\frac{4}{\frac{1}{5}} + \frac{-\frac{1}{5}}{4} \right) : \frac{1}{20}$$

$$= \left(20 - \frac{1}{20} \right) : \frac{1}{20}$$

$$= \frac{399}{20} \cdot \frac{20}{1} = 399 \text{ bulunur.}$$

Cevap: D

$$61. \frac{\frac{1}{4!} + \frac{1}{5!}}{\frac{1}{6!} - \frac{1}{7!}}$$

$$= \frac{6}{\frac{5!}{6}} = \frac{6}{5!} \cdot \frac{7!}{6}$$

$$= \frac{7 \cdot 6 \cdot 5!}{5!} = 42 \text{ bulunur.}$$

Cevap: C

$$62. a < 0 < b$$

$$I. \underbrace{|a-b|}_{-a+b} + \underbrace{|a|}_{-a} = 20$$

$$-a + b - a = 20$$

$$b - 2a = 20$$

$$II. \underbrace{|b-a|}_{b-a} + \underbrace{|b|}_{b} = 16$$

$$b - a + b = 16$$

$$2b - a = 16$$

I ve II'den

$$\begin{array}{r} -2/b - 2a = 20 \\ 2b - a = 16 \\ \hline -2b + 4a = -40 \\ + \quad 2b - a = 16 \\ \hline 3a = -24 \\ a = -8 \end{array}$$

ve $b + 16 = 20 \Rightarrow b = 4$ O halde $a.b = (-8).4 = -32$ bulunur.

Cevap: E

$$63. x \cdot y \cdot z > 0$$

$$x \cdot y = -8 \underbrace{|x|}_{+} \Rightarrow x \cdot y < 0$$

$$\frac{y}{z} = 6 \underbrace{|y|}_{-} \Rightarrow x \cdot y \cdot z > 0$$

$$z < 0$$

O halde $y < 0$ dir. $x > 0$ olur.

$$x \cdot y = -8 \cdot x \Rightarrow y = -8$$

$$\frac{y}{z} = 6(-y) \Rightarrow z = -\frac{1}{6}$$

$$x + y + z = 0$$

$$x - 8 - \frac{1}{6} = 0 \Rightarrow x = 8 + \frac{1}{6}$$

$$x = \frac{49}{6} \text{ çıkar.}$$

Cevap: A

TASARI EĞİTİM YAYINLARI

$$64. x, y \in \mathbb{Z}^+$$

$$2 < x < 6$$

$$\downarrow$$

$$3, 4, 5 \text{ olur.}$$

$$x = 3 \text{ için}$$

$$15 < 3 \cdot y < 18$$

$$5 < y < 6$$

$$\hookrightarrow \text{tamsayı olamaz}$$

$$x = 4 \text{ için}$$

$$15 < 4 \cdot y < 18$$

$$3, \dots < y < 4, \dots$$

$$\hookrightarrow y = 4 \text{ olabilir.}$$

$$x = 5 \text{ için}$$

$$15 < 5 \cdot y < 18$$

$$3 < y < 3, \dots$$

$$\hookrightarrow \text{tamsayı olamaz.}$$

$$\text{o halde } x = 4 \text{ ve } y = 4 \text{ olur.}$$

$$x + y = 4 + 4 = 8 \text{ bulunur.}$$

Cevap: C

65. $A = \left[-\frac{5}{2}, \sqrt{10}\right]$ kümesindeki tam sayılar

$$A = \{-2, -1, 0, 1, 2, 3\}$$

$B = \left[\sqrt{3}, \frac{17}{4}\right]$ kümesindeki tam sayılar

$$B = \{2, 3, 4\}$$

$$A \cup B = \{-2, -1, 0, 1, 2, 3, 4\}$$

Bu kümenin z (tamsayılar) kümesi ile kesişimi kendisidir.

O halde $n((A \cup B) \cap \mathbb{Z}) = 7$ 'dir.

Cevap: B

66. $2025 - 2024 + 2023 - 2022 + \dots + 3 - 2 + 1 = ?$

$$\underbrace{2025 - 2024}_1 + \underbrace{2023 - 2022}_1 + \dots + \underbrace{3 - 2}_1 + 1 = ?$$

$$\begin{aligned} \text{Terim Sayısı} &= \frac{2025 - 1}{2} + 1 \\ &= 1012 + 1 \\ &= 1013 \text{ bulunur.} \end{aligned}$$

Cevap: C

67. $ABD - BBC = 396$

$$100(A - B) + D - C = 396$$

$$\underbrace{100(A - B)}_4 + \underbrace{D - C}_{-4} = 396$$

$$AC - BD = ?$$

$$10(A - B) + (C - D) = ?$$

$$\underbrace{10(A - B)}_4 + \underbrace{(C - D)}_4 = ?$$

$$40 + 4 = ?$$

$$44 = ? \text{ bulunur.}$$

Cevap: D

68. $P(x) = x^3 - mx + 1$

$$\begin{array}{r} P(x-1) \mid x+1 \\ \hline K \end{array} \quad \begin{array}{r} P(x+1) \mid x-1 \\ \hline K \end{array}$$

$x = -1$ için ve $x = 1$ için

$$P(-2) = P(2) \text{ ise}$$

$$P(x) = x^3 - mx + 1$$

$$P(2) = 2^3 - m \cdot 2 + 1$$

$$P(-2) = (-2)^3 - m(-2) + 1$$

$$P(2) = 8 - 2m + 1$$

$$= -8 + 2m + 1$$

$$P(2) = 9 - 2m$$

$$= 2m - 7$$

$$P(-2) = P(2)$$

$$2m - 7 = 9 - 2m$$

$$4m = 16$$

$$m = 4 \text{ bulunur.}$$

Cevap: D

69. $Q(x) = k$ (sabit)

$$P(x) + Q(x) = 4x^2 + 5$$

$$P(x) + k = 4x^2 + 5$$

$$P(x) = 4x^2 + 5 - k$$

$$P(Qx) = 12 \text{ ise}$$

$$P(k) = 12 \text{ olur.}$$

$$4k^2 - k + 5 = 12$$

$$4k^2 - k - 7 = 0$$

$$\text{Kökler toplamı } \Sigma k = -\frac{b}{a} = \frac{1}{4} \text{ bulunur.}$$

Cevap: E

70. $\frac{1 + \sqrt{a}}{1 - a} - \frac{a}{1 - \sqrt{a}} = \frac{7}{2}$

$$\frac{1 + \sqrt{a}}{(1 + \sqrt{a})(1 - \sqrt{a})} - \frac{a}{1 - \sqrt{a}} = \frac{7}{2}$$

$$\frac{1 - a}{1 - \sqrt{a}} = \frac{7}{9}$$

$$\frac{(1 + \sqrt{a})(1 - \sqrt{a})}{1 - \sqrt{a}} = \frac{7}{2}$$

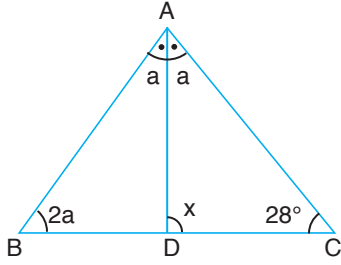
$$1 + \sqrt{a} = \frac{7}{2}$$

$$\sqrt{a} = \frac{7}{2} - 1 = \frac{5}{2}$$

$$a = \frac{25}{4} \text{ bulunur.}$$

Cevap: A

71.



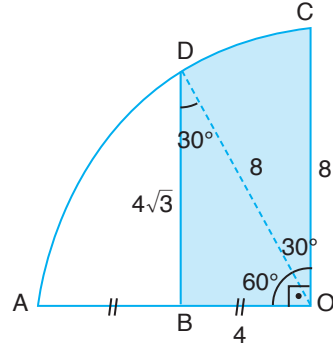
$$\begin{aligned} \widehat{ABC}'den \quad 2a + 2a + 28 &= 180^\circ \\ 4a &= 152 \\ a &= 38^\circ \end{aligned}$$

$\widehat{ADC}'den$

$$\begin{aligned} x + a + 28^\circ &= 180^\circ \\ x + 38 + 28 &= 180^\circ \\ x &= 180^\circ - 66 \\ x &= 114^\circ \text{ bulunur.} \end{aligned}$$

Cevap: E

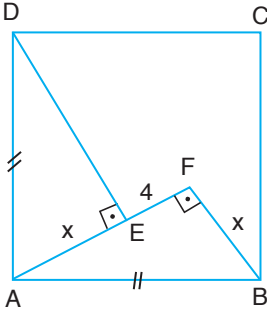
73.



$$\begin{aligned} \text{Taralı Alan} &= (\text{Dik Üçgen Alan}) + (\text{Daire Diliminin Alanı}) \\ &= \frac{4 \cdot 4\sqrt{3}}{2} + \frac{\pi 8^2 \cdot 30}{360} \\ &= 8\sqrt{3} + \frac{16\pi}{3} \text{ cm}^2 \end{aligned}$$

Cevap: B

72.



$\widehat{ABF} \cong \widehat{DAE}$
eşitliğinden dolayı
 $|AE| = |BF| = x$ olur.

$$A(\text{AFB}) = \frac{x \cdot (x+4)}{2} = 30$$

$$x^2 + 4x - 60 = 0$$

$$10 - 6$$

$$x = 6 \text{ cm}$$

$\widehat{AFB}'de$ pisagor teoreminden

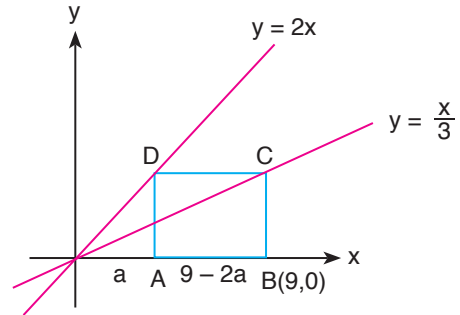
$$|AB|^2 = 6^2 + 10^2 = 136 \text{ ve}$$

$$A(\text{ABCD}) = |AB|^2 = 136$$

Cevap: A

TASARI EĞİTİM YAYINLARI

74.



$D(a, 2a), C(9, 2a)$ olur.

C noktası $y = \frac{x}{3}$ doğrusu üzerinde olduğundan

$$2a = \frac{9}{3} \Rightarrow a = \frac{3}{2}$$

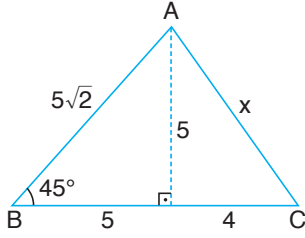
$$\text{Ç}(\text{ABCD}) = 2 \cdot (2a + 9 - a)$$

$$= 2 \cdot \left(\frac{3}{2} + 9\right)$$

= 21 br olur.

Cevap: C

75.

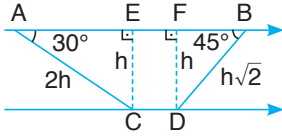


$$x^2 = 25 + 16$$

$$x^2 = 41 \Rightarrow x = \sqrt{41}$$

Cevap: A

76.



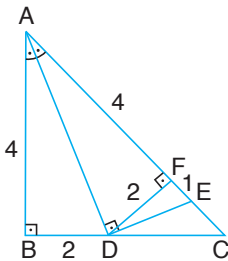
$ICEI \perp IABI$, $IDFI \perp IABI$

$AB \parallel CD \Rightarrow ICEI = IDFI = h$

$\Rightarrow IACI = 2h$, $IBDI = h\sqrt{2}$

$$\Rightarrow \frac{IACI}{IBDI} = \frac{2h}{h\sqrt{2}} = \frac{2}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \sqrt{2}$$

77.



$DF \perp AC$

$m(\widehat{BAD}) = m(\widehat{DAC})$

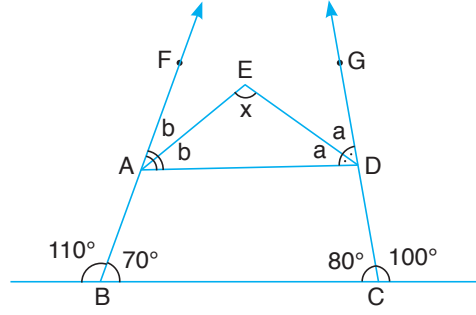
$\Rightarrow IBDI = IDFI = 2$, $IABI = IAFI = 4$

$\Rightarrow IFDI^2 = IAFI \cdot IFEI \Rightarrow 2^2 = 4 \cdot IFEI$

$\Rightarrow IFEI = 1 \Rightarrow IAEI = 4 + 1 = 5 \text{ cm}$

Cevap: B

78.



$$\Rightarrow 110^\circ + 100^\circ + 2a + 2b = 360^\circ$$

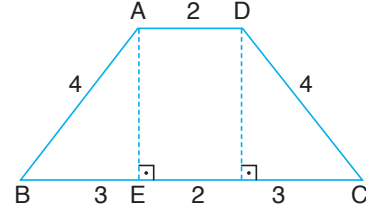
$$\Rightarrow 2 \cdot (a + b) = 150$$

$$\Rightarrow a + b = 75 \Rightarrow a + b + x = 180$$

$$\Rightarrow 75 + x = 180 \Rightarrow x = 105^\circ$$

Cevap: E

79.



$IDFI \perp IBCI$, $AD \parallel BC \Rightarrow IEFI = IADI = 2 \text{ cm}$

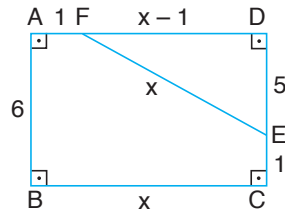
$IABI = ICDI \Rightarrow IBEI = IFCI = 3$

$$\Rightarrow IAEI^2 + 3^2 = 4^2 \Rightarrow IAEI^2 = 16 - 9 = 7 \text{ cm}$$

$$\Rightarrow IAEI = \sqrt{7}$$

Cevap: D

80.



$IABI = IDCI = 6 \Rightarrow IDEI = 5$

$IBCI = IADI = x \Rightarrow IFDI = x - 1$

$$\Rightarrow (x - 1)^2 + 5^2 = x^2 \Rightarrow x^2 - 2x + 1 + 25 = x^2$$

$$\Rightarrow 26 = 2x \Rightarrow x = 13$$

Cevap: C