

ÇÖZÜMLER

$$1. \frac{3-9 : \frac{3}{2} + 5}{2\frac{2}{3} - (-1\frac{1}{3})}$$

$$= \frac{3-9 \cdot \frac{2}{3} + 5}{\frac{8}{3} - (-\frac{4}{3})}$$

$$= \frac{3-6+5}{\frac{8}{3} + \frac{4}{3}} = \frac{2}{\frac{12}{3}} = \frac{2}{4} = \frac{1}{2} \text{ bulunur.}$$

Cevap: C

$$2. a = \frac{1}{0,5} = \frac{1}{\frac{1}{2}} = 2$$

$$b = 0,1666\dots = 0,1\bar{6} = \frac{16-1}{90} = \frac{15}{90} = \frac{1}{6}$$

$$c = \frac{1}{4}$$

O halde $a > c > b$ bulunur.

Cevap: B

$$3. (25)^{x+4} = (49)^{x-2y+12}$$

$$5^{2x+8} = 7^{2x-4y+24}$$

tabanlar aralarında asal bir tek durumda eşitlik oluşur kuvvetler sıfır olursa

$$2x + 8 = 0 \text{ ve } 2x - 4y + 24 = 0$$

$$2x = -8 \quad -8 - 4y + 24 = 0$$

$$x = -4 \quad 16 = 4y$$

$$y = 4$$

$$y - x = 4 - (-4) = 4 + 4$$

$$= 8 \text{ bulunur.}$$

Cevap: E

$$4. \frac{1}{3}9^{2x} = 2 \cdot 3^{2x+1} + 75 \cdot 9^x$$

$$\frac{1}{3}3^{4x} = 2 \cdot 3^{2x} \cdot 3^1 + 75 \cdot 3^{2x}$$

$$3^{4x-1} = 3^{2x}(6 + 75)$$

$$\frac{3^{4x-1}}{3^{2x}} = 81$$

$$3^{2x-1} = 3^4 \Rightarrow 2x-1 = 4$$

$$2x = 5$$

$$x = \frac{5}{2}$$

Cevap: A

$$5. a < 0 < b$$

$$\sqrt[4]{16a^4} - \sqrt[3]{27b^3} - \sqrt{4a^2 - 4ab + b^2}$$

$$= \sqrt[4]{2^4 a^4} - \sqrt[3]{3^3 b^3} - \sqrt{(2a - b)^2}$$

$$= \underbrace{|2a|}_{-} - \underbrace{|3b|}_{+} - \underbrace{|2a - b|}_{-}$$

$$= -2a - 3b + 2a - b$$

$$= -4b \text{ bulunur.}$$

Cevap: B

$$6. \frac{\sqrt{x+1} + \sqrt{25x^2 + 25x}}{25x-1} = 1$$

$$\sqrt{x+1} + 5\sqrt{x(x+1)} = 25x-1$$

$$\sqrt{x+1}(1+5\sqrt{x}) = (5\sqrt{x+1})(5\sqrt{x}-1)$$

$$\sqrt{x+1} = 5\sqrt{x}-1$$

$$x+1 = 25x-10\sqrt{x}+1$$

$$10\sqrt{x} = 24 \text{ (x)} \rightarrow \sqrt{x} \cdot \sqrt{x}$$

$$10 = 24\sqrt{x}$$

$$\frac{10}{24} = \sqrt{x} \Rightarrow \sqrt{x} = \frac{5}{12}$$

$$x = \frac{25}{144} \text{ bulunur.}$$

Cevap: E

$$\begin{aligned}
7. \quad & \sqrt{7-\sqrt{48}} + \sqrt{4+\sqrt{12}} \\
& = \sqrt{7-2\sqrt{12}} + \sqrt{4+2\sqrt{3}} \\
& = \sqrt{4-\sqrt{3}} + \sqrt{3} + \sqrt{1} \\
& = 2 - \sqrt{3} + \sqrt{3} + 1 \\
& = 3 \text{ bulunur.}
\end{aligned}$$

Cevap: D

$$\begin{aligned}
8. \quad & \frac{1}{b^2} - \frac{1}{a^2} = \frac{7}{32} \text{ ve } \frac{1}{a} + \frac{1}{b} = \frac{7}{8} \\
& \left(\frac{1}{b} + \frac{1}{a}\right)\left(\frac{1}{b} - \frac{1}{a}\right) = \frac{7}{32} \\
& \frac{7}{8} \cdot \left(\frac{1}{b} - \frac{1}{a}\right) = \frac{7}{32} \\
& \frac{1}{b} - \frac{1}{a} = \frac{1}{4}
\end{aligned}$$

O halde

$$\frac{1}{a} + \frac{1}{b} = \frac{7}{8}$$

$$\frac{1}{b} - \frac{1}{a} = \frac{1}{4}$$

$$\frac{2}{b} = \frac{7}{8} + \frac{1}{4} = \frac{9}{8}$$

$$b = \frac{16}{9}$$

$$9. \quad \frac{x-\sqrt{x}}{(x-1)^2} : \frac{x}{x+\sqrt{x}} = 5$$

$$\frac{x-\sqrt{x}}{(x-1)^2} \cdot \frac{x+\sqrt{x}}{x} = 5$$

$$\frac{x^2-x}{x \cdot (x-1)^2} = 5$$

$$\frac{x(x-1)}{x \cdot (x-1)^2} = 5$$

$$\frac{1}{x-1} = 5 \Rightarrow x-1 = \frac{1}{5}$$

$$x = \frac{1}{5} + 1$$

$$x = \frac{6}{5}$$

Cevap: C

$$10. \quad x^2 - 5x + 1 = 0$$

Bütün terimleri x ile bölelim.

$$x - 5 + \frac{1}{x} = 0$$

$$x + \frac{1}{x} = 5 \text{ (Her iki tarafın parantez karesini alalım.)}$$

$$x^2 + \frac{1}{x^2} + 2 \cdot x \cdot \frac{1}{x} = 25$$

$$x^2 + \frac{1}{x^2} = 25 - 2 = 23 \text{ bulunur.}$$

Cevap: C

$$11. \quad f(x+4) - f(x) = 5x \text{ eşitliğinden}$$

$$x = -2 \text{ için } f(2) - f(-2) = -10$$

$$x = 2 \text{ için } f(6) - f(2) = 10$$

$$+ \quad x = 6 \text{ için } f(10) - f(6) = 30$$

$$f(10) - f(-2) = 30 \text{ bulunur.}$$

Cevap: B

$$12. \quad x \in \mathbb{Z}$$

$$\frac{2x-3}{4} - \frac{2-x}{2} < \frac{x+7}{8}$$

$$4x - 6 - 8 + 4x < x + 7$$

$$8x - 14 < x + 7$$

$$7x < 21$$

$$x < 3$$

↳ En çok 2 olur.

Cevap: D

13. $181^2 \cdot 364^3 \equiv x \pmod{9}$

181'in 9 ile bölümünden kalan 1

364'ün 9 ile bölümünden kalan 4'tür.

$1^2 \cdot 4^3 = 64$ sayısının 9 ile bölümünden kalan 1'dir.

Cevap: B

14.
$$\begin{array}{r} A2C \\ -BA3 \\ \hline C78 \end{array}$$

$C = 1$

$A = 4$

$B = 2$ için sağlar.

$$\begin{array}{r} 421 \\ -243 \\ \hline 178 \end{array}$$

$\Rightarrow A \cdot B \cdot C = 4 \cdot 2 \cdot 1 = 8$ bulunur.

Cevap: D

15. $\frac{8! - 2 \cdot 7!}{9!}$

$= \frac{7!(8-2)}{7! \cdot 8 \cdot 9}$

$= \frac{6}{72} = \frac{1}{12}$ bulunur.

Cevap: B

16. $\frac{(n+1)}{(n-2)!} + \frac{n!}{(n-1)!} = 125$

$\frac{(n+1) \cdot n \cdot (n-1) \cdot (n-2)!}{(n-2)!} + \frac{n \cdot (n-1)!}{(n-1)!} = 125$

$(n+1) \cdot n \cdot (n-1) + n = 125$

$n = 5$ için

$6 \cdot 5 \cdot 4 + 5 = 125$ olur.

Cevap: C

17. $a, b, c \in \mathbb{R}$

$a \cdot c = 0$

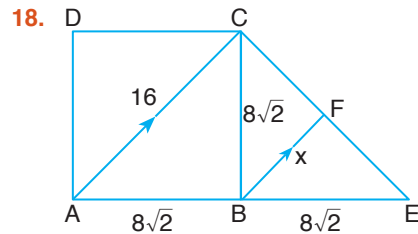
$a^3 \cdot (b^2) > 0 \Rightarrow 0 > 0$ olur.

+ Bu durumda $c = 0$ olur.

$a \cdot b < 0 \Rightarrow b < 0$ 'tür.

$b < c < a$ bulunur.

Cevap: C



$|AC|^2 = (8\sqrt{2})^2 + (8\sqrt{2})^2$

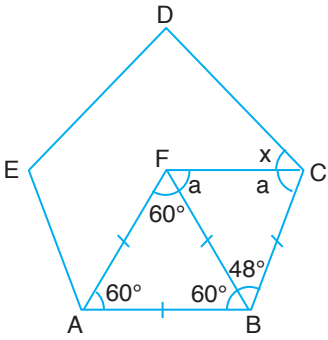
$|AC|^2 = 128 + 128 = 256$

$|AC| = 16$

$\frac{x}{16} = \frac{8\sqrt{2}}{16\sqrt{2}} \Rightarrow x = 8$ br olur.

Cevap: E

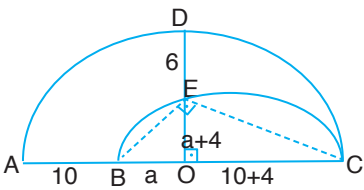
19.



$$\begin{aligned} x + a &= 108^\circ \\ 2a + 48 &= 180 \\ 2a &= 132 \\ a &= 66 \\ x + 66 &= 108 \\ x &= 108 - 66 \\ x &= 42 \\ &\text{bulunur.} \end{aligned}$$

Cevap: C

20.



$$\begin{aligned} [OD] &\perp [BC] \\ |OB| &= a \text{ olsun.} \\ |EO| &= a + 4 \text{ olur.} \\ |OC| &= 10 + a \end{aligned}$$

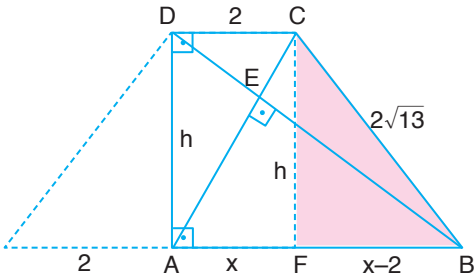
Öklid bağıntısından

$$\begin{aligned} (a + 4)^2 &= a \cdot (10 + a) \\ a^2 + 8a + 16 &= a^2 + 10a \\ 16 &= 2a \\ 8 &= a \end{aligned}$$

$$\begin{aligned} \text{O halde } |BC| &= a + 10 + a = 2a + 10 \\ &= 16 + 10 \\ &= 26 \text{ bulunur.} \end{aligned}$$

Cevap: D

21.



$$\begin{aligned} h^2 &= 2 \cdot x \\ h &= \sqrt{2x} \end{aligned}$$

CFB üçgeninde pisagor uygulanır ise

$$(\sqrt{2x})^2 + (x - 2)^2 = (2\sqrt{13})^2$$

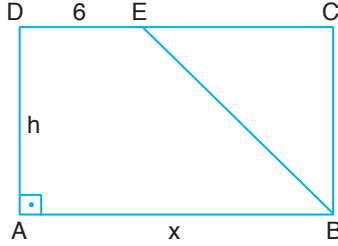
$$2x + x^2 - 4x + 4 = 52$$

$$x^2 - 2x - 48 = 0$$

$$(x + 6)(x - 8) = 0 \quad x = -6 \text{ ve } x = 8$$

Cevap: D

22.



$$\frac{A(ABED)}{A(ABCD)} = \frac{\frac{(6+x) \cdot h}{2}}{x \cdot h} = \frac{3}{5}$$

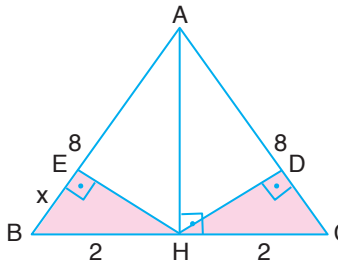
$$\frac{6+x}{2x} = \frac{3}{5}$$

$$30 + 5x = 6x$$

$$30 = x \text{ bulunur.}$$

Cevap: E

23.



$$\begin{aligned} |AB| &= |AC| \\ &\text{olduğundan} \\ |HE| &= |HD| \text{ ve } |HB| \\ &= |HC| \\ \widehat{HBE} &\cong \widehat{HCD} \text{ dir.} \\ |BE| &= x \text{ olsun.} \end{aligned}$$

Öklid bağıntısından $2^2 = x \cdot 8$

$$x = \frac{1}{2}$$

Pisagordan

$$|BE|^2 + |EH|^2 = |BH|^2$$

$$\left(\frac{1}{2}\right)^2 + |EH|^2 = 2^2$$

$$|EH|^2 = 4 - \frac{1}{4}$$

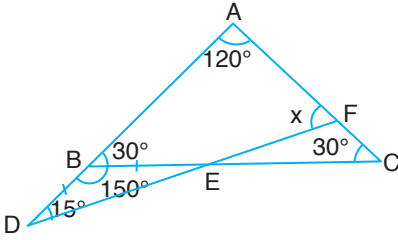
$$|EH| = \sqrt{4 - \frac{1}{4}} = \sqrt{\frac{15}{4}}$$

Alanların toplamı $= 2 \cdot \frac{1}{2} \cdot \frac{\sqrt{15}}{4}$

$$= \frac{1}{2} \cdot \frac{\sqrt{15}}{2} = \frac{\sqrt{15}}{4} \text{ bulunur.}$$

Cevap: E

24.



$$|AB| = |AC|$$

olduğundan ikizkenar üçgen

$$m(\widehat{ABC}) = m(\widehat{ACB}) = 30^\circ \text{ olur.}$$

$$m(\widehat{DBE}) = 150^\circ$$

$$|BE| = |BD| \text{ olduğundan}$$

$$m(\widehat{BDE}) = 15^\circ \text{ dir.}$$

O halde

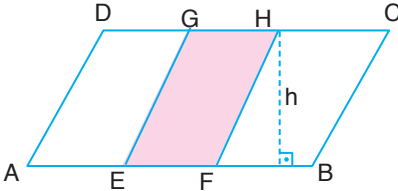
AFD üçgeninden

$$15 + 120 + x = 180^\circ$$

$$x = 180 - 135 = 45^\circ \text{ bulunur.}$$

Cevap: E

25.



$$|AB| = |DC| = 20 \text{ olsun.}$$

$$|GH| = 4 \text{ ve } |EF| = 5 \text{ olur.}$$

$$\frac{A(\text{EFGH})}{80} = \frac{\frac{4+5}{2} \cdot h}{20 \cdot h} = \frac{9}{40}$$

$$A(\text{EFGH}) = 18 \text{ cm}^2 \text{ olur.}$$

Cevap: A

26. $x > 0$

$$x = 5y \Rightarrow \frac{x}{y} = \frac{5 \cdot 3k}{1 \cdot 3k} = \frac{15k}{3k}$$

$$2z = 7y \Rightarrow \frac{z}{y} = \frac{7 \cdot k}{3 \cdot k} = \frac{7k}{3k}$$

$k = 1$ için

$$x = 15k, y = 3k = 3, z = 7k = 7$$

O halde

$y < z < x$ bulunur.

Cevap: C

$$27. \frac{b-1}{1-\frac{1}{b}} = x \Rightarrow \frac{b-1}{\frac{b-1}{b}} = x$$

$$x = \frac{b-1}{b} \cdot \frac{b}{b-1} = \frac{b}{a} \text{ bulunur.}$$

a, b ve x tamsayı olduğundan a sayısı 6'yı tam olarak bölmelidir.

$a + b = 8$ olduğundan

$$\frac{b}{a} = \frac{7}{1} = x \text{ için } z < x < 5 \text{ koşulu sağlamaz.}$$

$$\frac{b}{a} = \frac{6}{2} = 3 = x \text{ olmalıdır.}$$

O halde,

$$b - a = 6 - 2 = 4 \text{ bulunur.}$$

Cevap: D

28.

$$a + b = 7$$

$$-1/a - c = 3$$

$$a + b = 7$$

$$-a + c = -3$$

$$b + c = 4 \text{ olur.}$$

$$\frac{33 - a^2 - ab + bc + ac}{b + c - 2}$$

$$= \frac{33 - a(a+b) + c(b+a)}{b + c - 2}$$

$$= \frac{33 - (a+b)(a-c)}{b + c - 2}$$

$$= \frac{33 - 7 \cdot 3}{4 - 2} = \frac{33 - 21}{2} = \frac{12}{2} = 6 \text{ bulunur.}$$

$$\text{II. yol } a + b = 7$$

$$a - c = 3 \text{ ortak olan } a = 0 \text{ olsun.}$$

$$\text{O halde } b = 7 \text{ ve } c = -3 \text{ olur.}$$

$$= \frac{33 - 0 - 0 - 21 + 0}{7 - 3 - 2} = \frac{12}{2} = 6 \text{ olur.}$$

Cevap: C

$$29. x^2 + 4y^2 = 41$$

$$(x - 2y)^2 = (3)^2$$

$$x^2 + 4y^2 - 4xy = 9$$

$$41$$

$$41 - 9 = 4xy$$

$$32 = 4x \cdot y$$

$$8 = xy \text{ bulunur.}$$

Cevap: D

$$30. |25 - x^2| = |x - 5|$$

$$|x^2 - 25| = |x - 5|$$

$$|x - 5| \cdot |x + 5| - |x - 5| = 0$$

$$|x - 5|(|x + 5| - 1) = 0$$

$$I) |x - 5| = 0 \text{ ve } II) |x + 5| - 1 = 0$$

$$x = 5$$

$$|x + 5| = 1$$

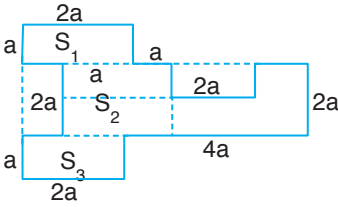
$$x + 5 = 1 \text{ veya } x + 5 = -1$$

$$x = -4 \quad x = -6$$

$$\Sigma x = 5 - 4 - 6 = -5 \text{ bulunur.}$$

Cevap: B

31.



$$S_1 + S_2 + S_3 + S_4 + S_5$$

$$= a \cdot 2a + 2a \cdot 2a + 2a \cdot a + 3a \cdot a + a \cdot a$$

$$= 2a^2 + 4a^2 + 2a^2 + 3a^2 + a^2$$

$$= 12a^2$$

$$32. P(x) = ax^2 + bx + c$$

$$P(1) = a + b + c = 0$$

$$P(2) = 4a + 2b + c = 0$$

$$a + b + c = 4a + 2b + c$$

$$a = 3a + b$$

$$-3a = b$$

$$-3 = \frac{b}{a} \text{ bulunur.}$$

Cevap: B

$$33. a + \frac{1}{b} = \Rightarrow 5a \cdot b + 1 = 5b$$

$$b + \frac{1}{a} = 7 \Rightarrow a \cdot b + 1 = 7a$$

$$7a = 5b$$

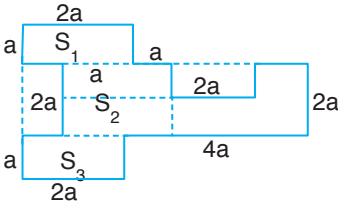
$$\downarrow \downarrow$$

$$5k \quad 7k$$

$$\frac{a+b}{b-a} = \frac{5k+7k}{7k-5k} = \frac{12k}{2k} = 6 \text{ bulunur.}$$

Cevap: B

31.



$$S_1 + S_2 + S_3 + S_4 + S_5$$

$$= a \cdot 2a + 2a \cdot 2a + 2a \cdot a + 3a \cdot a + a \cdot a$$

$$= 2a^2 + 4a^2 + 2a^2 + 3a^2 + a^2$$

$$= 12a^2$$

Cevap: C

$$32. P(x) = ax^2 + bx + c$$

$$P(1) = a + b + c = 0$$

$$P(2) = 4a + 2b + c = 0$$

$$a + b + c = 4a + 2b + c$$

$$a = 3a + b$$

$$-3a = b$$

$$-3 = \frac{b}{a} \text{ bulunur.}$$

Cevap: B

$$34. \frac{a}{7} = \frac{b}{5} = \frac{c}{4}$$

$$a = 7k, b = 5k, c = 4k$$

$$\frac{2\sqrt{7 \cdot 7k} + 4\sqrt{5 \cdot 5k}}{3\sqrt{4 \cdot 4k}} = \frac{14\sqrt{k} + 30\sqrt{k}}{12\sqrt{k}}$$

$$= \frac{34\sqrt{k}}{12\sqrt{k}} = \frac{17}{6} \text{ bulunur.}$$

Cevap: A

$$35. \frac{3}{\frac{1}{x}} - \frac{1}{\frac{3}{x}} = 24$$

$$3x - \frac{x}{3} = 24$$

$$\frac{8x}{3} = 24$$

$$x = \frac{24 \cdot 3}{8}$$

$$x = 9 \text{ bulunur.}$$

Cevap: D

36. $z = 2x + y$
 $3y = x + z$ (z'yi yerine yazalım.)
 $3y = x + 2x + y$
 $2y = 3x \Rightarrow x = 2k$ ve $y = 3k$ ($k \in \mathbb{R}$)
 $z = 2 \cdot 2k + 3k$
 $z = 4k + 3k = 7k$
 $x + y + z = 36$
 $2k + 3k + 7k = 36$
 $12k = 36 \Rightarrow k = 3$
 O halde $y = 3k = 3 \cdot 3 = 9$ bulunur.

Cevap: C

37. $a + 2b + c = 18$
 $2/2a - b + 2c = 21$
-
- $a + 2b + c = 18$
 $+ 4a - 2b + 4c = 42$
-
- $5a + 5c = 60$
 $5(a + c) = 60$
 $a + c = 12$

$a + 2b + c = 18$
 $12 + 2b = 18$
 $2b = 6$
 $b = 3$

O halde
 $a + c + b = 12 + 3 = 15$ bulunur.

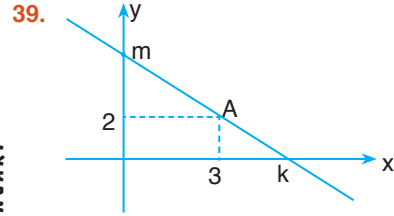
Cevap: E

38. $S(E) = 24$, $S(A \setminus B) = 8$, $S(A^1 \cap B^1) = 6$
 $(A^1 \cap B^1) = (A \cup B)^1$ dir.
 $S(A^1 \cap B^1) = S((A \cup B)^1) = 6$
 $S(A \cup B) + S((A \cup B)^1) = S(E)$
 $S(A \cup B) + 6 = 24$
 $S(A \cup B) = 18$ olur.

Buna göre

$S(A \cup B) = S(A \setminus B) + S(B)$
 $18 = 8 + S(B)$
 $S(B) = 10$ bulunur.

Cevap: C



$$\frac{x}{k} + \frac{y}{m} = 1$$

A noktası bu doğru üzerinde olduğuna göre denklemini sağlar.

o halde

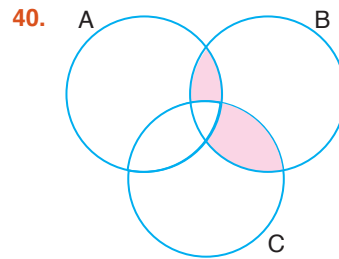
$$\frac{3}{k} + \frac{2}{m} = \frac{1}{1}$$

(m) (k) (k.m)

$$3m + 2k = k \cdot m$$

Buna göre $(k - 3)(m - 2) = k \cdot m - 2k - 3m + 6$
 $= 3m + 2k - 2k - 3m + 6$
 $= 6$ bulunur.

Cevap: B



$(B \cap (A \cup C)) \setminus (A \cap B \cap C)$ bulunur.

Cevap: D

41. E = 57, Ç = 9, V = 2, A = 6, N = 8, K = 1

VANKE → 26817

KABNE → 16387

BAVÇE → 36297

ÖACVE → 46027

LAVÇE → 56297

Cevap: E

42. 6:1 = c = 6

b:4 = 12 ⇒ b = 48

a:1 = 2 ⇒ a = 2

⇒ a + b + c = 2 + 48 + 6
= 56

Cevap: D

43. $\frac{(3a-3)}{3} \blacksquare \frac{(2b+1)}{9} = \frac{3a}{5} + \frac{b}{3}$

3a - 3 = 3 2b + 1 = 9

3a = 6 2b = 8

a = 2 b = 4

$\frac{3a}{5} + \frac{b}{3} = \frac{3 \cdot 2}{5} + \frac{4}{3} = \frac{6}{5} + \frac{4}{3} = \frac{18+20}{15} = \frac{38}{15}$

$\frac{(3a-4)}{11} \blacktriangle \frac{(b^3-2)}{6} = \frac{a}{3} + \frac{2b}{5}$

3a - 4 = 11 b³ - 2 = 6

3a = 15 b³ = 8

a = 5 b = 2

$\frac{a}{3} + \frac{2b}{5} = \frac{5}{3} + \frac{2 \cdot 2}{5} = \frac{5}{3} + \frac{4}{5} = \frac{25+12}{15} = \frac{37}{15}$

$\frac{38}{15} - \frac{37}{15} = \frac{1}{15}$

Cevap: A

44. b + c = 4

$\begin{cases} a \cdot c = 45 \\ a \cdot b = 27 \end{cases}$

$\frac{c}{b} = \frac{45}{27} = \frac{5}{3}$

c = 5k b = 3k

b + c = 3k + 5k = 4

8k = 4

k = $\frac{1}{2}$

a · b = 27

a · 3k = 27

a · k = 9

a · $\frac{1}{2}$ = 9

a = 18

Cevap: E

TASARI EĞİTİM YAYINLARI

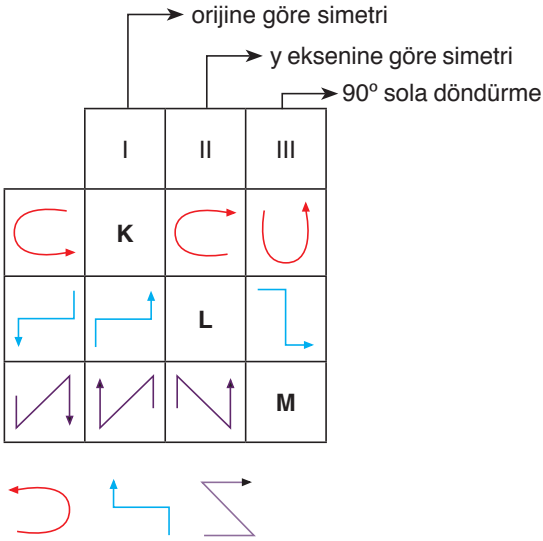
45. Beyaz + Beyaz = Turuncu

Turuncu + Turuncu = Beyaz

Beyaz + Turuncu = Beyaz üstüne benek

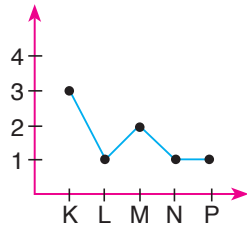


Cevap: C

46. 

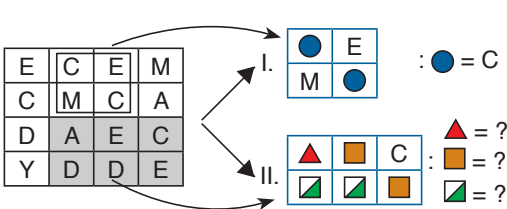
Cevap: D

47. → Dilimlere düşen açılar oranlayıp en sade halini grafik üzerinde göstereceğiz.



45° → 1 N, P ve L
 90° → 2 M
 135° → 3 K

Cevap: C

48. 

Cevap: C

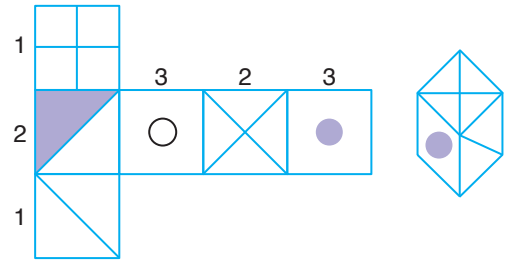
49.
$$\begin{array}{r} \text{I} \\ 8 \times 4 = 32 \\ + 9 \times 6 = 54 \\ \hline 86 \end{array} \begin{array}{l} 2 \\ \overline{)43} \end{array}$$

$$\begin{array}{r} \text{II} \\ 3 \times 7 = 21 \\ + 5 \times 9 = 45 \\ \hline 66 \end{array} \begin{array}{l} 2 \\ \overline{)33} \end{array}$$

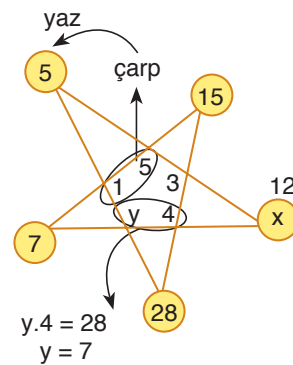
$$\begin{array}{r} \text{III} \\ 11 \times 5 = 55 \\ + 13 \times 7 = 91 \\ \hline 146 \end{array} \begin{array}{l} 2 \\ \overline{)73} \end{array} \text{ bulunur}$$

Cevap: C

TASARI EĞİTİM YAYINLARI

50. 

Cevap: E

51. 

Cevap: E

52. $2k + ü = 2.3a + 5a = 6a + 5a = 11a$

$4ç + k$

$4.2a + 3a = 8a + 3a = 11a$

I. $ü + 3ç = 3k + z$

$2.2k + 3ç = k + ü + 2ç$

$ü + 2ç = 3k$

$k + ç = ü$

$k + ç + 2a = 3k$

$3a + 2a = ü$

$k + 3ç = 3k$

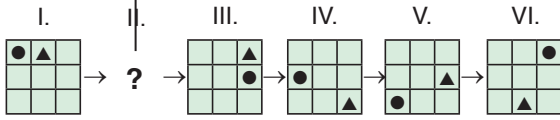
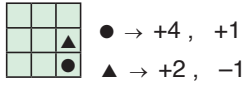
$5a = ü$

$3a = 2k$

$\downarrow \quad \downarrow$
 $2a \quad 3a$

Cevap: B

53.



Cevap: D

54.

I. $18 \blacktriangle 26 = 17 = 1 + 8 + 2 + 6$

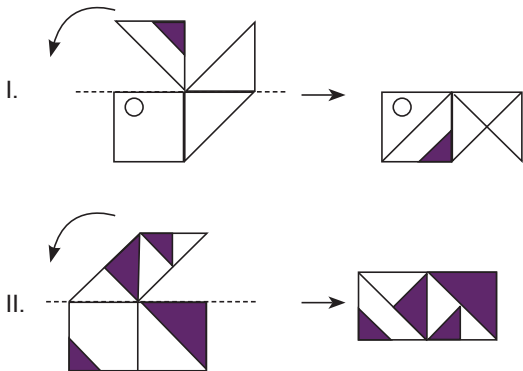
II. $16 \blacktriangle 12 = 10 = 1 + 6 + 1 + 2$

III. $10 \blacktriangle 14 = 6 = 1 + 0 + 1 + 4$

IV. $18 \blacktriangle 30 = 1 + 8 + 3 + 0 = 12$

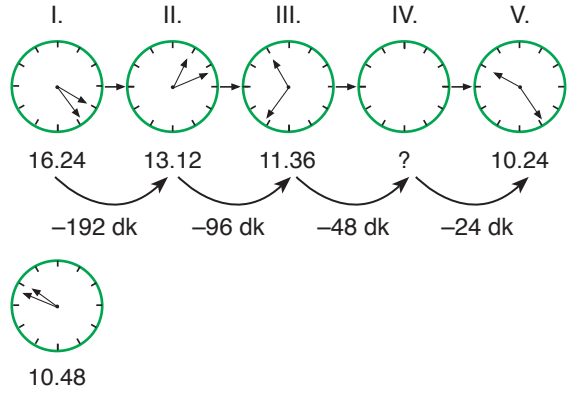
Cevap: B

55.



Cevap: D

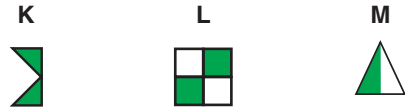
56.



Cevap: E

TASARI EĞİTİM YAYINLARI

57.



Cevap: C

58. Kurala göre

$c = 14 \quad \frac{d+c}{a+c} = \frac{10}{9}$

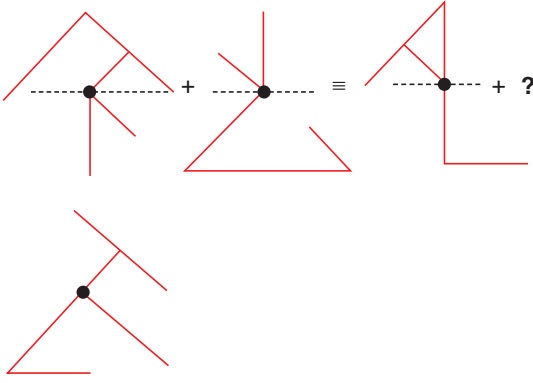
$d = 6 \quad \frac{6+14}{a+14} = \frac{10}{9}$

$\frac{20}{a+14} = \frac{10}{9} = \frac{20}{18}$

$a + 14 = 18 \Rightarrow a = 4$

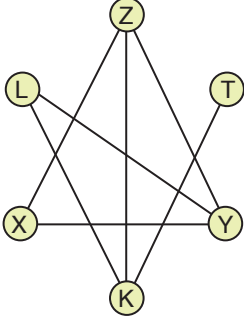
Cevap: A

59.



Cevap: B

60.



Cevap: D

61. (Siyah dairelerin içini çarp) – (Beyaz Daire içlerini topla)

$$(4.7) - (2 + 3) = 28 - 5 = 23$$

$$(5.8) - (3 + 6) = 40 - 9 = 31$$

$$(9.6) - (8 + 4) = 54 - 12 = 42$$

$$(7.5) - (9 + 1) = 35 - 10 = 25$$

$$x = (6.7) - (4 + 8) = 42 - 12 = 30$$

Cevap: E

62. ABCD karesi 4 birim kareden oluşur.

$$\text{Alan}(ABCD) = 20 \text{ ise}$$

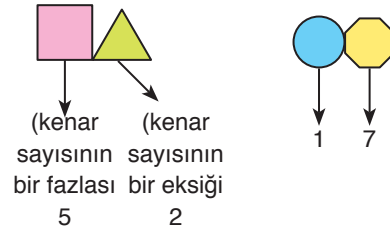
$$4 \cdot (\text{birim kare}) = 20$$

Bir tane birim karenin alanı 5 br^2 bulunur.

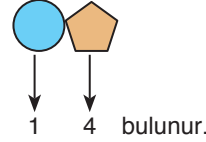
Tarıklı kareler sayılırsa 105 bulunur.

Cevap: B

63.

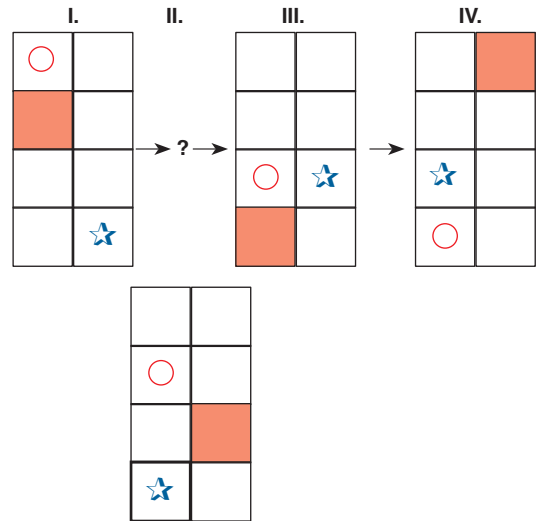


O halde



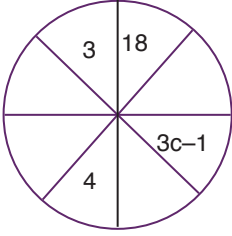
CEVAP: A

64.



Cevap: B

65.



$$a = 3 \quad a^2 \cdot b = 18 \quad \frac{d+b}{2} = 4 \quad a + 2c = 3c - 1$$

$$9 \cdot b = 18 \quad \frac{d+2}{2} = 4 \quad 3 + 1 = c$$

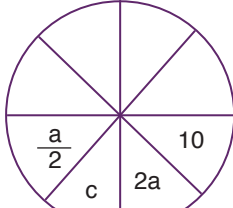
$$b = 2 \quad d + 2 = 8 \quad c = 4$$

$$d = 6$$

$$\frac{a \cdot c}{d \cdot b} = \frac{3 \cdot 4}{6 \cdot 2} = \frac{12}{12} = 1$$

Cevap: A

66.



$$\frac{a}{2} = b \quad \frac{d+b}{2} = c \quad c = 2a$$

$$\frac{2}{2} = b \Rightarrow b = 1$$

$$\frac{d+1}{2} = 4$$

$$d + 1 = 8$$

$$d = 7 \text{ bulunur.}$$

$$\underline{\underline{c = 4}}$$

$$a + 2a = 10$$

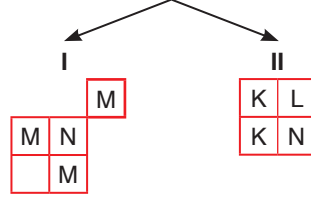
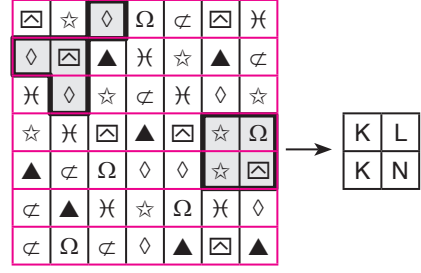
$$a + 4a = 10$$

$$5a = 10$$

$$\underline{\underline{a = 2}}$$

Cevap: E

67.



$$M = \diamond$$

$$K = \star$$

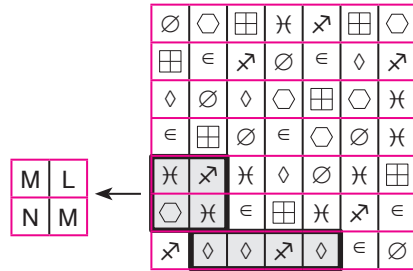
$$N = \square$$

$$L = \Omega$$

Cevap: A

TASARI EĞİTİM YAYINLARI

68.



$$K = \diamond$$

$$M = \times$$

$$L = \times$$

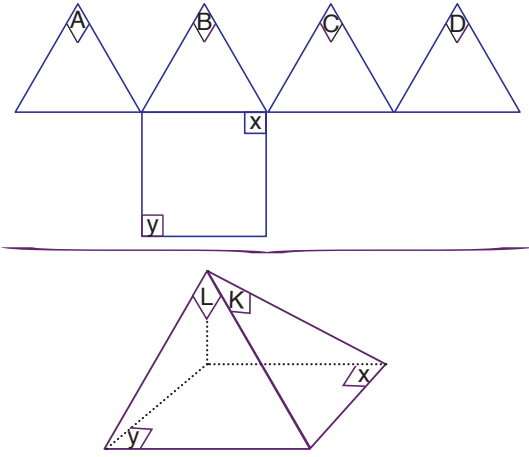
$$N = \circ$$

Cevap: E

69. 1. adım $\rightarrow 3^1 = 3$
 2. adım $\rightarrow 3^2 = 9$
 3. adım $\rightarrow 3^3 = 27$
 4. adım $\rightarrow 3^4 = 81$
 5. adım $\rightarrow 3^5 = 243$ tane taralı üçgen

Cevap: E

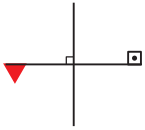
70.



$$K = C \quad L = D$$

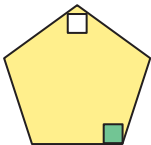
Cevap: D

71.



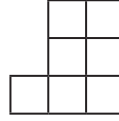
Cevap: E

72. Şekli sağ tarafında simetrisi alınınca



Cevap: A

73.



Cevap: C

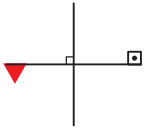
74.

B	X	C	+	D	$\rightarrow 33$
X		\div		\div	
7	+	2	X	A	$\rightarrow 13$
-		-		+	
L		K	-	E	$\rightarrow 3$
	$\downarrow 20$		$\downarrow 2$		$\downarrow 8$

$$\begin{aligned} E^2 - C + D &= 5^2 - 6 + 9 \\ &= 25 - 6 + 9 \\ &= 28 \text{ bulunur.} \end{aligned}$$

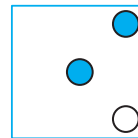
Cevap: E

71.

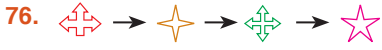


Cevap: E

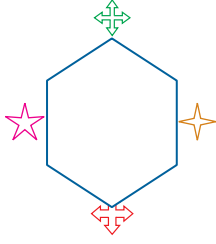
75. $\bullet + \bullet = \circ$
 $\circ + \circ = \bullet$



Cevap: E



Saat yönü takip etmekte bu şıklardan C seçeneği farklıdır.



Cevap: C



78. Kesişim sorusu

I. şekilde kare, daire ve üçgenin kesişen bölgesi

olduğu görülmekte.



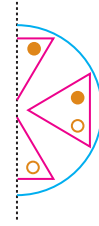
II. altıgen, daire ve üçgenin kesişen bölgesi

olduğu görülmekte.



Cevap: C

79. Üst şekil alt şeklin üstüne katlanmakta daha sonra 90° sağa doğru çevrilmekte.



Cevap: E

80.

1.	2.	3.
Yatay çizgi sayısı	Kare Sayısı	Yatay dikey çizgi sayısı çarpımı
4	$2 \times 3 + 1 \times 2$ $6 + 2 = 8$	$4 \times 3 = 12$
1.	2.	3.
4	$4 \times 3 + 3 \times 2 + 2 \times 1$ $12 + 6 + 2 = 20$	$4 \times 5 = 20$

$$2^{4-20+20} = 2^4 = 16$$

Cevap: A