

Bu testte cevaplayacağınız toplam soru sayısı 80'dir.

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

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

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

$$7. \quad \bullet \quad x + z = 2 \rightarrow z = 2 - x$$

$$y + m = -2 \rightarrow m = -2 - y$$

$$\bullet \quad z \cdot m = 13$$

$$(2 - x)(-2 - y) = 13$$

$$-4 - 2y + 2x + xy = 13$$

$$-4 + 2(x - y) + 3 = 13$$

$$2(x - y) - 1 = 13$$

$$2(x - y) = 14$$

$$\boxed{x - y = 7}$$

Cevap: D

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

Cevap: B

9. $x + y = a \Rightarrow (x + y)^2 = a^2$
 $x^2 + y^2 + 2xy = a^2$
 $15 + 2.5 = a^2$
 $25 = a^2$
 $a = 5$
 $\Rightarrow x + y = 5$
 $x^3 + y^3 = (x + y)^3 - 3xy(x + y)$
 $= 5^3 - 3.5.5$
 $= 125 - 75$
 $= 50$

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. • $\frac{x}{3xy} + \frac{y}{2xy} = \frac{xy}{xy}$
 $\frac{1}{3y} + \frac{1}{2x} = 1$
 • $\frac{y}{4yz} + \frac{z}{2yz} = \frac{yz}{yz}$
 $\frac{1}{4z} + \frac{1}{2y} = 1$
 $\Rightarrow \frac{-1}{2} / \frac{1}{3y} + \frac{1}{2x} = 1 \rightarrow \frac{-1}{6y} - \frac{1}{4x} = -\frac{1}{2}$
 $\frac{1}{3} / \frac{1}{4z} + \frac{1}{2y} = 1 \rightarrow + \frac{1}{12z} + \frac{1}{6y} = \frac{1}{3}$
 $24. / \frac{1}{12z} - \frac{1}{4x} = -\frac{1}{6}$
 $\frac{2}{z} - \frac{6}{x} = -4$

Cevap: E

TASARI EĞİTİM YAYINLARI

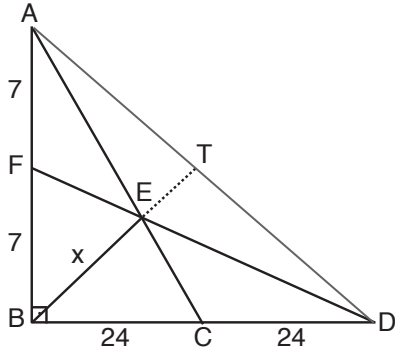
12. $x = 48 \quad y = 3$
 $\Rightarrow \frac{x}{y} = \frac{48}{3} = 16$

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

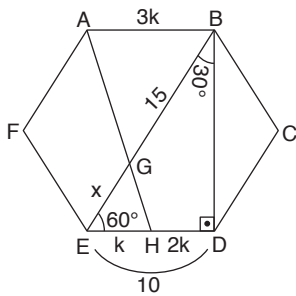
24.



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

25.

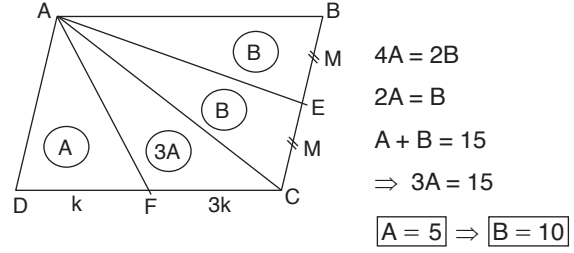


$$\frac{3k}{k} = \frac{15}{x} \Rightarrow x = 5$$

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

Cevap: B

26.



$$\begin{aligned} 4A &= 2B \\ 2A &= B \\ A + B &= 15 \\ \Rightarrow 3A &= 15 \end{aligned}$$

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

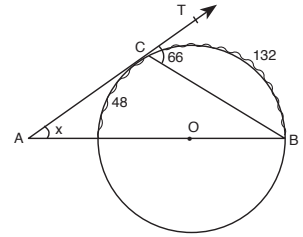
$$A(AFCE) = 3A + B = 15 + 10 = 25$$

Cevap: A

27.

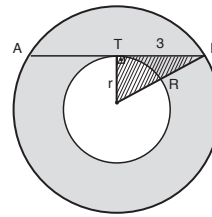
$$x = \frac{132 - 48}{2}$$

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



Cevap: C

28.



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

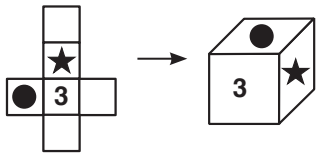
Cevap: B

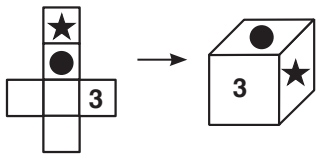
29.

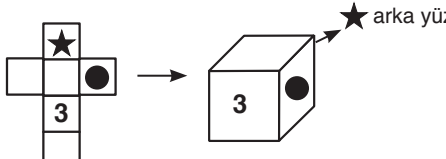
$$\frac{2 \cdot 2}{2} + \frac{1 \cdot 2}{2} + \frac{1 \cdot 2}{2} + \frac{2 \cdot 2}{2}$$

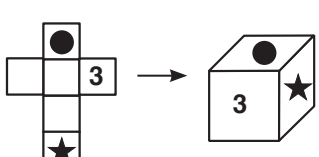
$$= 2 + 1 + 1 + 2 = 6$$

Cevap: B

30. I. 

II. 

III. 

IV. 

I, II ve IV olabilir.

Cevap: E

32.

+	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

TASARI EĞİTİM YAYINLARI

31. 1. adım 2. adım 3. adım 4. adım ... 10. adım

1 5 9 13 n = (37)

 +4 +4 +4

$$\text{Terim sayısı} = \frac{\text{Son Terim} - \text{İlk Terim}}{\text{Artış Miktarı}} + 1$$

$$10 = \frac{n-1}{4} + 1$$

$$9 = \frac{n-1}{4} \Rightarrow n-1 = 36$$

n = 37 bulunur.

Cevap: C

33. K = 30

$$\begin{array}{l} a \cdot 6 \cdot b = 30 \\ \downarrow \downarrow \\ 5 \quad 1 \end{array} \quad \begin{array}{l} a \cdot 3 \cdot c = 30 \\ \downarrow \downarrow \\ 5 \quad 2 \end{array}$$

$$\begin{array}{l} c \cdot 1 \cdot d = 30 \\ \downarrow \\ 2 \end{array} \quad \begin{array}{l} b \cdot 5 \cdot e = 30 \\ \downarrow \downarrow \\ 1 \quad 6 \end{array}$$

d = 15

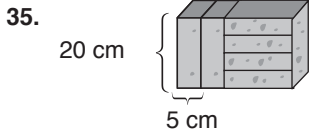
a = 5, b = 1, c = 2, d = 15, e = 6

$$a + b - c + d = 5 + 1 - 2 + 15 = 19$$

Cevap: E



Cevap: B



4 adet tuğla birinin boyuna eşit o halde

$$4 \cdot A = 20 \text{ cm}$$

$$A = 5 \text{ cm}$$

şeklimizde 4 dik, 4 yatay tuğlayı bir blok kabul ettiğimizde

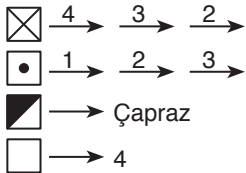
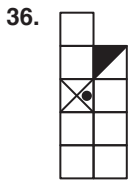
$$4 \times 5 + 20 = 40 \text{ cm}$$

$$\begin{array}{r} 640 \quad | \quad 40 \\ -640 \quad | \\ \hline 000 \end{array} \quad \text{16 bloktan oluşmuş şekil}$$

Bir blokta 8 tuğla var şeklimizde

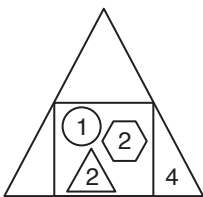
$$8 \times 16 = 128 \text{ tuğla kullanılmıştır.}$$

Cevap: E



Cevap: A

- 37.



$$3[(1^2 + 3 \cdot 2 + 6 \cdot 2) + 4]$$

$$3 \cdot 23 = 69$$

Cevap: D

38. I. Şekil

$$5 \cdot 4 + 5 = 25$$

$$A = 3 \cdot 12 + 3 = 39$$

$$8 \cdot 6 + 8 = 56$$

$$B = 6 \cdot 13 + 6 = 84$$

$$6 \cdot 8 + 6 = 54$$

$$C = 13 \cdot 6 + 13 = 91$$

$$4 \cdot 5 + 4 = 24$$

$$D = 12 \cdot 3 + 12 = 48$$

$$A + B + C + D = 262 \text{ bulunur.}$$

Cevap: D

39. $3 \blacksquare 2 = (3 \bullet 2) \cdot (2 \blacktriangle 3)$

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

$$2 \blacktriangle 3 = \frac{(2 - 3)^2}{2 + 3} = \frac{1}{5}$$

$$3 \blacksquare 2 = \frac{6}{5} \cdot \frac{1}{5} = \frac{6}{25}$$

Cevap: C

40. $\frac{8!}{6! \cdot 2!} = \frac{8 \cdot 7}{2} = 28$ tane ABC yazılabilir.

Cevap: D

41. $K = 0,1322222...2...$

$$L = 0,1323232...32...$$

$$M = 0,1321321...132...$$

O halde K'nin a_{2023} değeri 2'dir.

L'nin 1'den sonra devri 32 yani 2'nin katlarında 3 ile bitmekte. a_{2023} değeri 2'dir. (2023; 3'ün katı olmadığı için)

M'nin 3'ün katlarında 2 ile bitmekte.

$$\begin{array}{r} 2023 \quad | \quad 3 \\ \hline \end{array} \quad \text{O halde } a_{2023} = 1 \text{ dir.}$$

Kalan: 1

$$K \rightarrow 2$$

$$L \rightarrow 2$$

$$M \rightarrow 1$$

$$K + L + M = \textcircled{5} \text{ bulunur.}$$

$$\downarrow$$

$$a_{2023}$$

Cevap: C

42.

+	a	b	c
a			
b			28
c			

x	a	b	c
a		108	
b			
c	144		

I. tablodan $b + c = 28$

II. tablodan $a \cdot b = 108$

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

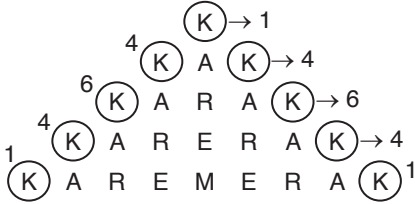
$$a(b + c) = 252$$

$$\frac{252}{28}$$

$$a = 9$$

Cevap: C

43.



Toplamda 31 tane MERAK vardır.

Şunu da görebiliriz.

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

Cevap: B

44.

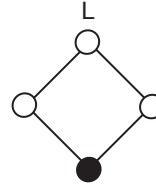
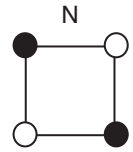
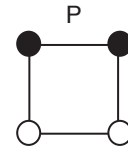
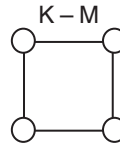


M → ♥

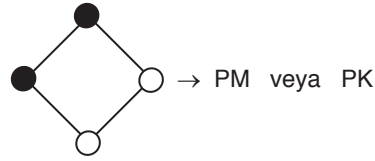
N → ☆

Cevap: E

45.



O halde



Cevap: B

TASARI EĞİTİM YAYINLARI

46.

$$A = 7, \quad R = 5, \quad B = 4$$

$$C = 6, \quad M = 8, \quad P = 1$$

$$75747 \rightarrow \text{ARABA}$$

$$76747 \rightarrow \text{ACABA}$$

$$57817 \rightarrow \text{RAMPA}$$

$$87573 \rightarrow \text{MARAZ}$$

Cevap: E

47.

$$485621 \xrightarrow{x} 846512 \xrightarrow{y} 651284 \xrightarrow{z} 681254$$

Cevap: B

48.

$$\blacksquare = 3, \quad \triangle = 5, \quad \boxtimes = 4$$

$$\star = 2, \quad \bullet = 1$$

$$5325 \rightarrow \triangle \blacksquare \star \triangle$$

$$2135 \rightarrow \triangle \blacksquare \star \triangle$$

$$1234 \rightarrow \bullet \star \blacksquare \boxtimes$$

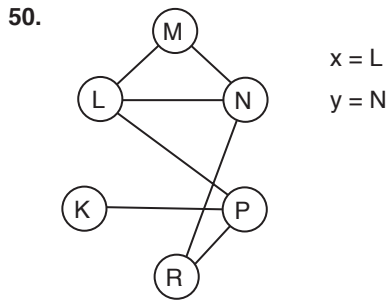
$$\bullet \blacksquare \triangle \boxtimes \rightarrow 1354$$

Cevap: C

49. $a_1 = 2^1 + 1 = 3$
 $a_2 = 2^2 + 1 = 5$
 $a_3 = 2^3 + 1 = 9$
 $a_4 = 2^4 + 1 = 17$
 \vdots
 $a_{10} = 2^{10} + 1$
 \vdots
 $a_{15} = 2^{15} + 1$

$Y - X = (2^{15} + 1) - (2^{10} + 1)$
 $= 2^{15} + 1 - 2^{10} - 1$
 $= 2^{10}(2^5 - 1)$
 $= 2^{10} \cdot 31 = 1024 \cdot 31 = 31744$

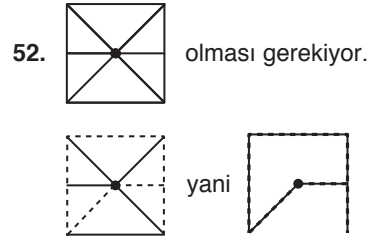
Cevap: C



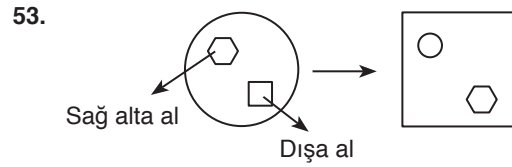
Cevap: B

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

Cevap: C

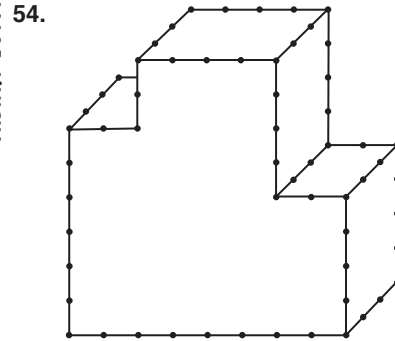


Cevap: E



Cevap: E

TASARI EĞİTİM YAYINLARI



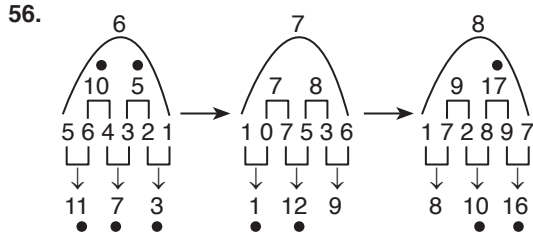
Cevap: B

Şekildeki küp sayısı 156 adet

Cevap: B

55. $\alpha = \left| \frac{11 \cdot dk - 60 \cdot \text{saat}}{2} \right|$
 $\alpha = \left| \frac{11 \cdot 42 - 60 \cdot 3}{2} \right|$
 $\alpha = \left| \frac{462 - 180}{2} \right|$
 $\alpha = 141^\circ$

Cevap: B

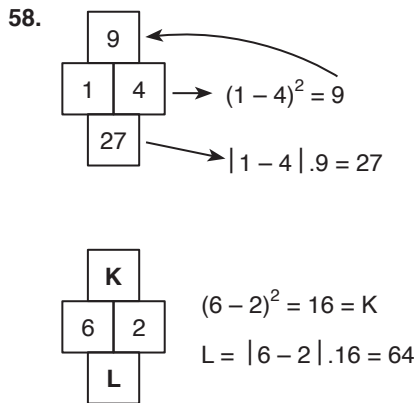


→ 890768 bulunur.

Cevap: B

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

Cevap: B



Cevap: D

59. I →
 II →
 III →
 IV →

Cevap: C

60.

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

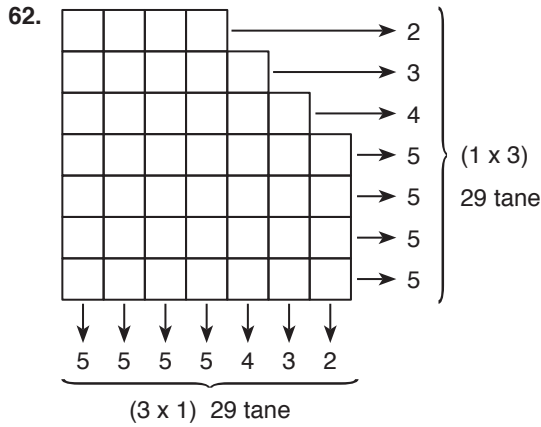
$$\frac{360^\circ}{20} = 18^\circ$$

- K → 6.18 = 108°
 L → 4.18 = 72°
 M → 2.18 = 36°
 N → 8.18 = 144

Cevap: D

61. (Kenar sayısı) x (çizgi değeri = 8)
- I. 3.24 = 72
 II. 4.16 = 64
 III. 6.24 = 144
 IV. 5.32 = 160
 V. 8.16 = 128 bulunur.

Cevap: D



$29 + 29 = 58$ tane

Cevap: D

63. $\frac{\triangle}{9} = (9 - 1) + (9 - 2) + (9 - 3) + \dots + 0$
 $8 + 7 + 6 + \dots + 0 = \frac{8 \cdot 9}{2} = 36$
 $\frac{6}{\nabla} = (6 + 1) + (6 + 2) + (6 + 3) + \dots + (2 + 6)$
 $7 + 8 + 9 + 10 + 11 + 12 = 57$
 $36 + 57 = 93$

Cevap: E

64. Karşılıklı daire içi toplamlar eşit olmalı

I. _____	II. _____
$11 + 17 = 28$	$17 + 18 = 35$
$18 + 10 = 28$	$29 + 6 = 35$
$19 + 9 = 28$	$5 + 30 = 35$

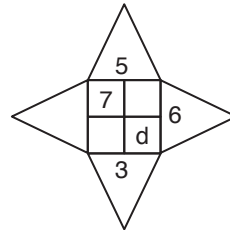
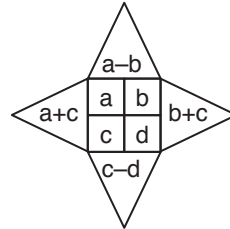
III. _____ $32 < x + y + z < 35$
 $15 + x = y + 8 = z + 19 = 25$
 $x = 10, y = 17$ ve $z = 6$
 $x + y + z = 10 + 17 + 6 = 33$ olur.
 O halde
 $x + z - y = 10 + 6 - 17 = -1$

Cevap: A

65. $a - b = 5, a = 7, c - d = 3$
 $7 - b = 5$
 $2 = b$
 $b + c = 6$
 $c = 4$
 $4 - d = 3$
 $1 = d$

Cevap: A

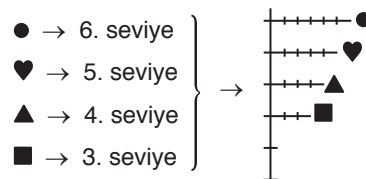
66.



$b = 4, b + c = 9, a - b = c$
 $c = 5, a - 4 = 5$
 $a = 9$
 $K = a + c$
 $K = 9 + 5 = 14$

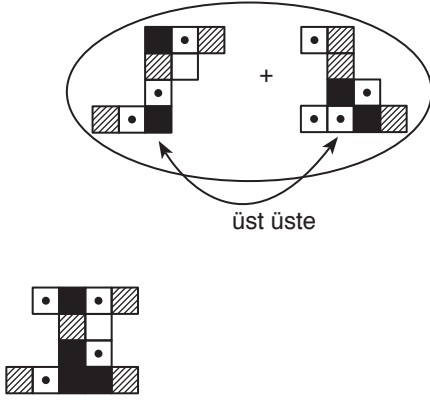
Cevap: D

67. Bulunduğu seviye kadar sağa doğru



Cevap: A

68. Üst üste konulmakta
baskın renk ön plana çıkmakta



Cevap: E

71. I.
 $7 + 3 + 2 = 12$
 $8 + 3 + 1 = 12$ } $12 \cdot 12 = 144$

II.
 $9 + 4 + 3 = 16$
 $6 + 4 + 5 = 15$ } $16 \cdot 15 = 240$

III.
 $1 + 9 + 2 = 12$
 $1 + 9 + 3 = 13$ } $12 \cdot 13 = 156$

IV.
 $2 + 6 + 3 = 11$
 $7 + 6 + 4 = 17$ } $11 \cdot 17 = 187$

Cevap: E

69. $\triangle \rightarrow 5$, $\bullet \rightarrow 3$, $\circ \rightarrow 4$, $\diamond \rightarrow 9$
 $\nabla \rightarrow 2$, $\square \rightarrow 1$, $\blacksquare \rightarrow 8$



O halde

$\square \nabla \blacksquare \bullet \square \rightarrow 13821$
 1 2 8 3 1

Cevap: A

72. $\bullet \rightarrow (-)$ fark
 $* \rightarrow (x)$ çarpma
 $\triangle \rightarrow (+)$ toplam
 $(21 \bullet 27) + (4 * 3) - (12 \triangle 5)$
 $\downarrow \quad \downarrow \quad \downarrow$
 $6 + 12 - 17 = 1$

Cevap: A

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

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

$$6x + 4y = 44$$

$$-2/ \quad 5x + 2y = 30$$

$$-4x = -16$$

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

olur.

O halde ? = $\Pi \Pi$

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

Cevap: B

73. \triangle
 BAT1 \rightarrow BTA1
 \downarrow
 yer değiştiriyor

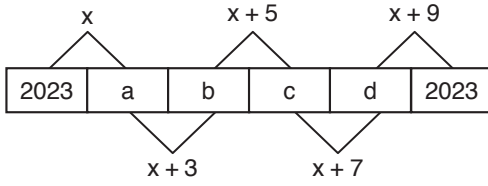
\hexagon
 KE5L \rightarrow 5LKE
 \downarrow
 yer değiştiriyor

MERT $\xrightarrow{\triangle}$ MRET $\xrightarrow{\hexagon}$ ETMR $\xrightarrow{\star}$ TERM

EL7K $\xrightarrow{\triangle}$ E7LK $\xrightarrow{\star}$ 7EKL

Cevap: A

74. Kural gereği



$$\begin{aligned} x &= 2023 + a \\ a + b &= x + 3 \end{aligned} \Rightarrow a + b = 2023 + a + 3 \Rightarrow b = 2026$$

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

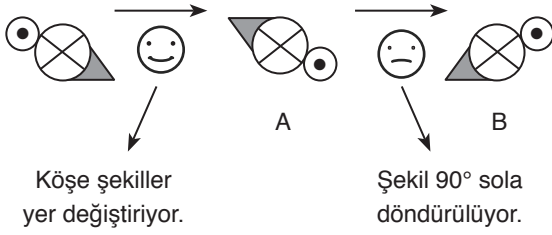
$$c + d = x + 7 \rightarrow a + 2 + d = 2023 + a + 7 \Rightarrow d = 2028$$

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

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

Cevap: C

75.



Köşe şekiller yer değiştiriyor.

Şekil 90° sola döndürülüyor.

Cevap: C

76. I. (Kare içinin çarpımı) – (Üçgen içinin çarpımı)

$$\begin{aligned} &= (2.3.4.5) - (12.8) \\ &= 120 - 96 \\ &= 24 \end{aligned}$$

II. (1.7.2.4) – (15.5)

$$\begin{aligned} &= 56 - 75 \\ &= -19 \end{aligned}$$

III. (3.6.4.4) – (9.10)

$$\begin{aligned} &= 288 - 90 \\ &= 198 \end{aligned}$$

IV. (5.2.4.6) – (11.9)

$$\begin{aligned} &= 240 - 99 \\ &= 141 \end{aligned}$$

Cevap: B

77. I. $24 - (17 + 2) = 24 - 19 = 5$

II. $20 - (9 + 6) = 20 - 15 = 5$

III. $42 - (20 + 17) = 42 - 37 = 5$

IV. $32 - (x + 11) = 5$

$$32 - x - 11 = 5$$

$$16 = x \text{ bulunur.}$$

Cevap: E

78.

●	◆	∅	△	⇒	♥	Π
◆	Π	◆	△	♥	∅	⇒
∅	△	♥	∅	⇒	Π	◆
△	∅	Π	⇒	△	◆	♥
⇒	◆	⇒	♥	∅	△	Π
♥	♥	△	Π	◆	⇒	∅
Π	⇒	∅	◆	Π	♥	△

$$\begin{aligned} &[(\Rightarrow \bullet \heartsuit) \bullet \emptyset] \bullet (\triangle \blacklozenge) \\ &= (\triangle \bullet \emptyset) \bullet \emptyset \\ &= \Pi \bullet \emptyset \\ &= \emptyset \end{aligned}$$

Cevap: D

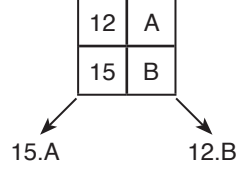
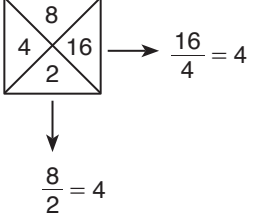
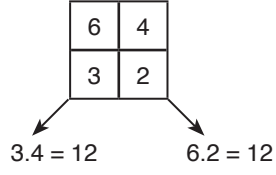
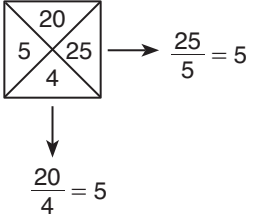
79. Ortak olanlar silinip kalanlar yazılıyor.

O halde.



Cevap: D

80.



$$15.A = 12B$$

$$5A = 4B$$

$$\downarrow \quad \downarrow$$

$$4k \quad 5k$$

$$A + B = 4k + 5k = 9k$$

$k = 2$ için $A + B = 18$ bulunur.

Cevap: C