

ÇÖZÜMLERİ

1. $(\underbrace{a \triangle c}_e) \triangle (\underbrace{e \triangle b}_c) = e \triangle c = \underline{d}$

Cevap: D

2. $(\underbrace{a \triangle x}_e) \triangle b = c$
 $\Rightarrow a \triangle x = e \Rightarrow x = c$

Cevap: C

3. $A \equiv 4$, $M \equiv 2$, $V \equiv 5$, $i \equiv 8$
 $MAVi \equiv 2458$

Cevap: D

4. $\bigcirc \equiv 4$, $\blacktriangle \equiv 6$, $\square \equiv 3$, $\triangle \equiv 5$
 $\bigcirc \blacktriangle \square \triangle = 4635$

Cevap: B

5. $a + b = 13$
 $b + c = 11$
 $\underline{+ c + a = 12}$
 $2a + 2b + 2c = 36$
 $a + b + c = 18 \Rightarrow a = 7$
 $\underline{11}$

Cevap: D

6. $y.z = 2x.y$

$\underline{z = 2x}$

$x.z = 3z$

$x.2x = 32$

$\underline{x = 4} \Rightarrow z = 8$

Cevap: D

7.

x	a	b	c
a		b^3	
b			b^4
c			

+	a	b	c
a		6	
b			10
c			

$a.b = b^3$

$b.c = b^4$

$\underline{a = b^2}$

$\underline{c = b^3}$

$\left. \begin{array}{l} a + b = 6 \Rightarrow b^2 + b = 6 \\ b + c = 10 \Rightarrow b + b^3 = 10 \end{array} \right\} \Rightarrow b = 2 \Rightarrow c = 8$

Cevap: E

8.

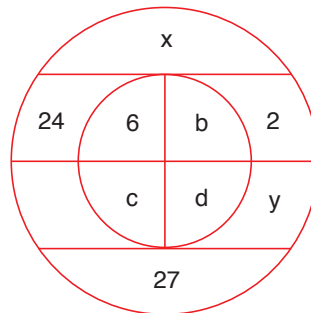
$1 \otimes (3 \otimes 2) = 1 \otimes (3^2 - 5)$

$= 1 \otimes 4$

$= 1^2 + 4^3 = 65$

Cevap: C

9.



$\frac{6}{c} = 2 \Rightarrow c = 3$

$6.d = 24 \Rightarrow d = 4$

$x = (3 - 4)^6 \Rightarrow \underline{x = 1}$

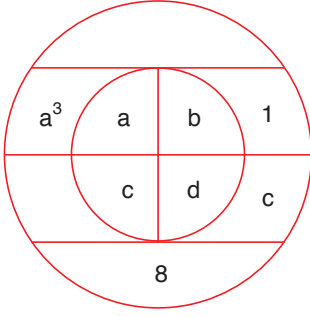
$(6 - b)^3 = 27 \Rightarrow b = 3$

$y = 3.3 \Rightarrow y = 9$

$x + y = \underline{10}$

Cevap: B

10.



$$a.d = a^3 \Rightarrow d = a^2$$

$$\frac{a}{c} = 1 \Rightarrow c = a$$

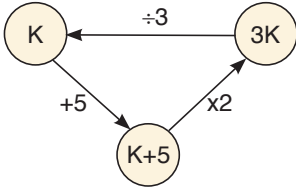
$$b.c = c \Rightarrow b = 1$$

$$(a - b)^c = (a - 1)^a = 8 \Rightarrow a = 3$$

$$\Rightarrow d = 9$$

Cevap: C

11.

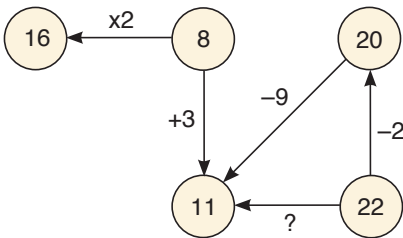


$$\Rightarrow 2(K + 5) = 3K$$

$$\Rightarrow K = 10$$

Cevap: A

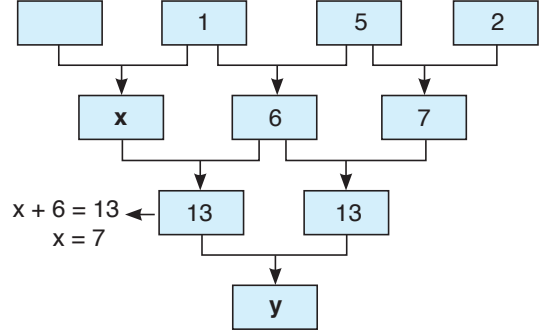
12.



$$? \equiv \div 2$$

Cevap: E

13.



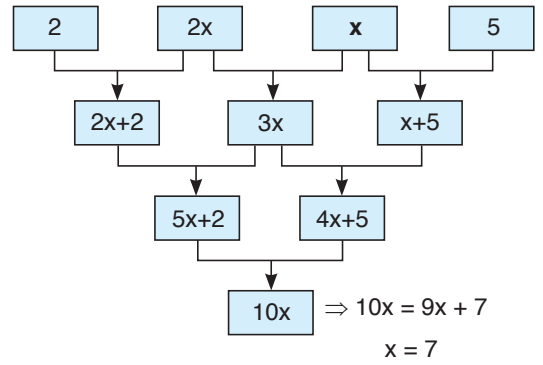
$$y = 13 + 13$$

$$y = 26$$

$$x + y = 33$$

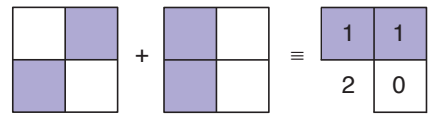
Cevap: C

14.

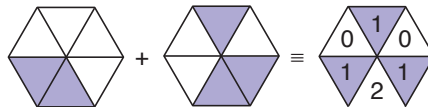


Cevap: C

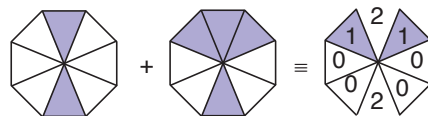
15. I.



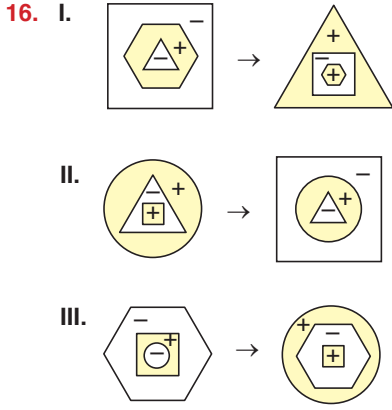
II.



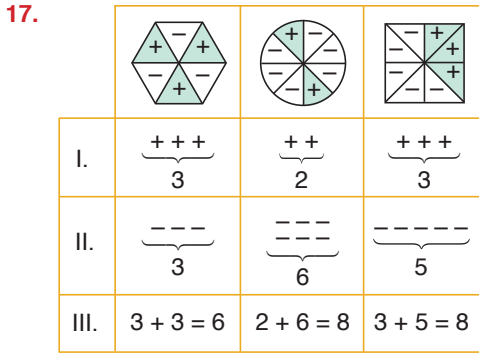
III.



Cevap: B



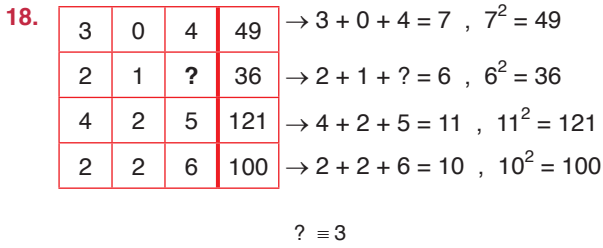
Cevap: D



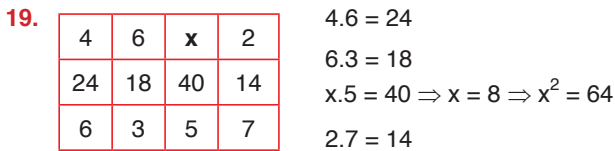
$$x = 6, y = 6, z = 3$$

$$\Rightarrow x + y + z = 15$$

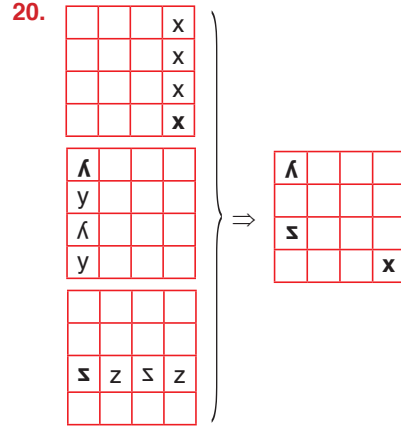
Cevap: D



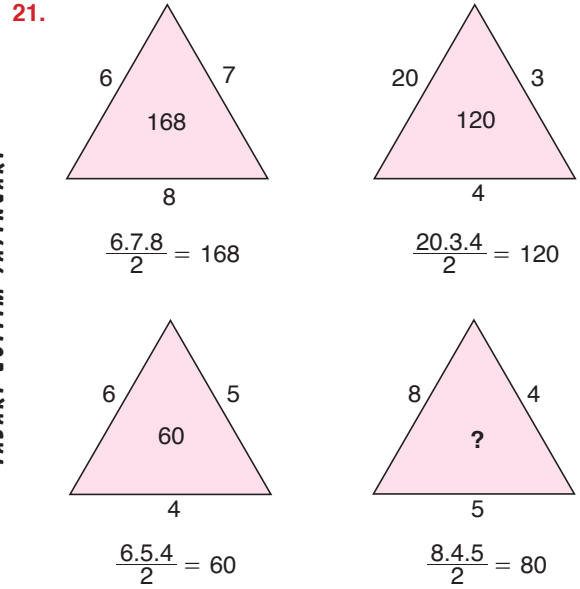
Cevap: C



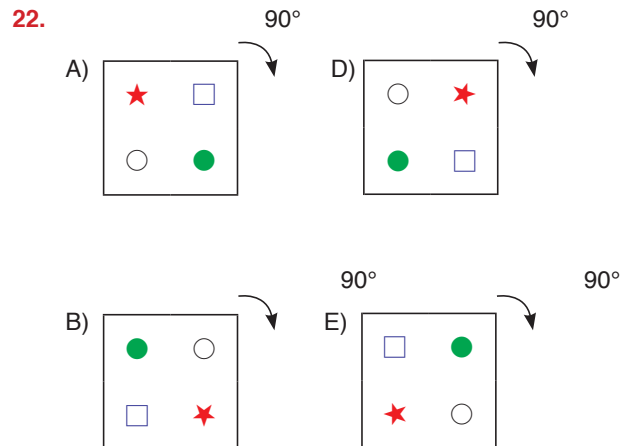
Cevap: A



Cevap: B



Cevap: C



Cevap: C

23. I. $\triangle + \square \equiv \triangle + \triangle + \triangle$

$\Rightarrow \square \equiv \triangle + \triangle$

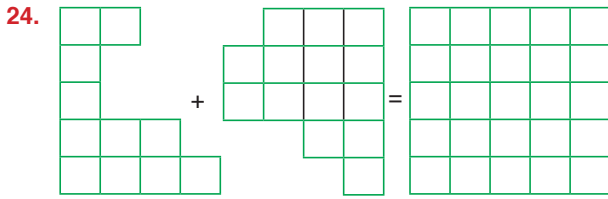
II. $\bigcirc + \bigcirc + \square \equiv \square + \square + \triangle + \triangle$

$\Rightarrow \bigcirc \equiv \triangle + \triangle$

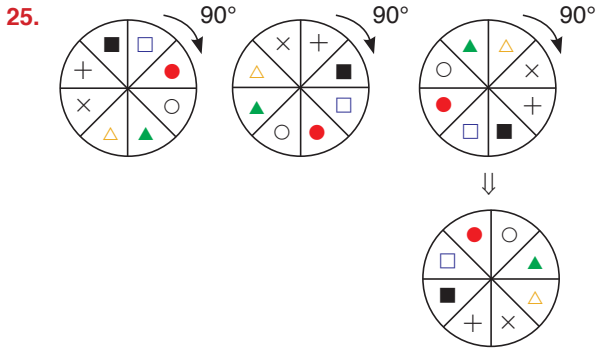
III. $\bigcirc + \bigcirc + \triangle$

$\Rightarrow \triangle + \triangle + \triangle + \triangle + \triangle \equiv \square + \square + \triangle$

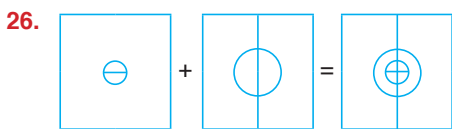
Cevap: E



Cevap: C



Cevap: D



Cevap: B

27. $11, 10, 16, 14, 20, 17, 23, 19$

$-1, +6, -2, +6, -3, +6, -4$

Cevap: D

28. $12, 25, 14$

$\sqrt{25} + 2 + 5 = 12$

$(1 + 4)^2 = 25$

$18, 81, 36$

$\sqrt{81} + 8 + 1 = 18$

$(3 + 6)^2 = 81$

$?, 36, 24$

$\sqrt{36} + 3 + 6 = 15$

$(2 + 4)^2 = 36$

Cevap: B

29.

5	4	1	3	2
3	1	x = 2	5	4
4	2	3	1	5
1	5	4	2	3
2	3	5	4	1

$\Rightarrow x = 2$

Cevap: B

30. I. $\triangle \triangle \square \square \equiv \square \square \square \square$

$\Rightarrow \triangle \triangle \equiv \square \square$

II. $\square \square \square \square \equiv \triangle \triangle \square \square$

$\Rightarrow \square \square \equiv \triangle \triangle$ ①

$\Rightarrow \square \square \equiv \square \square$

$\Rightarrow \square \equiv \square$ ②

III. $\square \square + ? \equiv \triangle \triangle \square \square$

①, ②

$\square \square \square \square + ? \equiv \square \square \square \square$

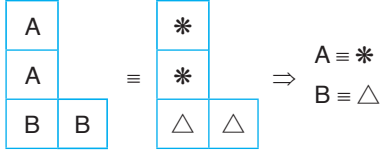
$\Rightarrow ? \equiv \square$

Cevap: A

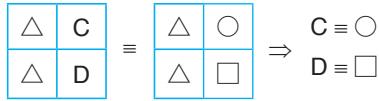
31. I. $\square\square\square \equiv \triangle\triangle\triangle$ II. $\square\triangle\triangle \equiv \square\square\square$ ① $\Rightarrow \square\square\square\square \equiv \square\square\square\square$ $\Rightarrow \square \equiv \square$ III. $\square\triangle\triangle \equiv \square\triangle\triangle \equiv ?$

Cevap: A

32. I.

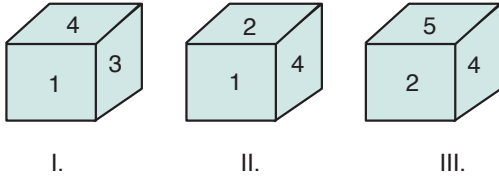


II.



Cevap: C

33.

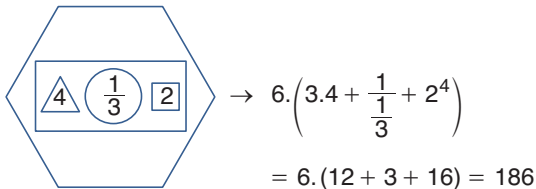


II. şekilden dolayı 2 nin karşısı (A) 1 veya 4 olamaz. (Accordingly II, opposite of 2 (A) can not be 1 or 4)

III. şekilden dolayı 5 in karşısı (B) 4 olamaz. (Accordingly III, opposite of 5 (B) can not 4).

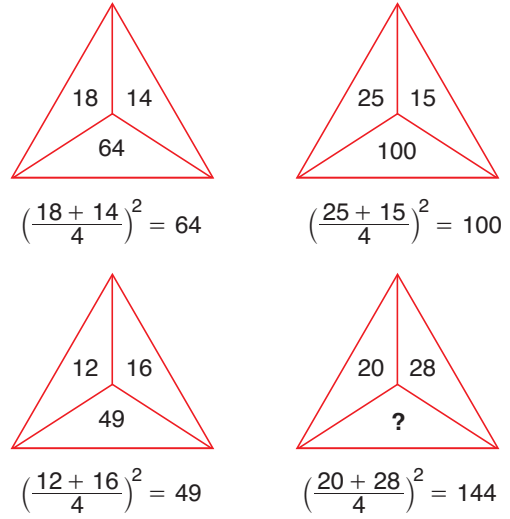
Cevap: D

34.



Cevap: A

35.



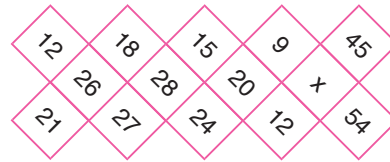
Cevap: E

36.

12	15	18	$\div 3$	456
10	25	5	$\div 5$	251
28	49	35	$\div 7$	475
45	27	81	$\div 9$	539 = x olur.

Cevap: B

37.



$$\frac{12 + 18 + 21 + 27}{3} = 26$$

$$\frac{18 + 27 + 15 + 24}{3} = 28$$

$$\frac{15 + 9 + 12 + 24}{3} = 20$$

$$\frac{9 + 45 + 54 + 12}{3} = 40 = x \text{ bulunur}$$

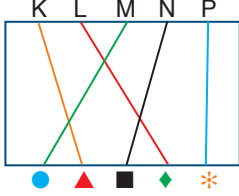
Cevap: E

38. $112 \rightarrow 1^2 + 1^2 + 2^2 = 1 + 1 + 4 = 6$
 $235 \rightarrow 2^2 + 3^2 + 5^2 = 4 + 9 + 25 = 38$
 $423 \rightarrow 4^2 + 2^2 + 3^2 = 16 + 4 + 9 = 29$
 $712 \rightarrow 7^2 + 1^2 + 2^2 = 49 + 1 + 4 = 54$

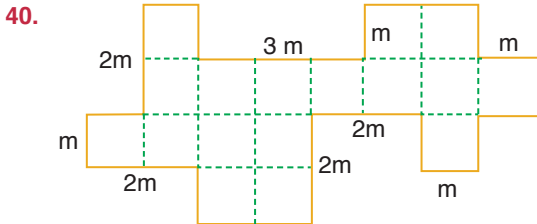
Cevap: A

39. I. şekilden II. şekilden III. şekilden
- | | | |
|-------|-------|-------|
| ● → 3 | 1 → N | K → ▲ |
| ▲ → 4 | 2 → P | L → ◆ |
| ■ → 1 | 3 → M | M → ● |
| ◆ → 5 | 4 → K | N → ■ |
| * → 2 | 5 → L | P → * |

O halde



Cevap: C



Çevre = 28 m bulunur.

Cevap: E

41.

$$\left(2 - \frac{1}{3}\right) \cdot \left(1 - \frac{1 + \frac{1}{2}}{2}\right)$$

$$\left(2 - \frac{2}{3}\right) \cdot \left(1 - \frac{1 + \frac{1}{4}}{2}\right)$$

$$\left(\frac{4}{3}\right) \cdot \left(1 - \frac{5}{4}\right)$$

$$\frac{4}{3} \cdot \left(1 - \frac{5}{8}\right) = \frac{4}{3} \cdot \frac{3}{8} = \frac{1}{2}$$

Cevap: C

42. $a, \frac{1}{b} \in \mathbb{N}, a + \frac{1}{b} = 15 \Rightarrow$

$$\left(a, \frac{1}{b}\right) = \begin{cases} (0, 15) \\ (1, 14) \\ \vdots \\ (7, 8) \\ (8, 7) \\ \vdots \\ (14, 1) \end{cases}$$

$$\max\left(\frac{a}{b}\right) = \frac{7}{1} = 7.8 = 56$$

Cevap: E

43. $\frac{0,200 - 0,025}{0,5} = \frac{0,175}{0,5} = \frac{175}{500} = \frac{7}{20}$

Cevap: C

44. $\left(\frac{\sqrt{3} + 1 + \sqrt{3} - 1}{\sqrt{3} + 1 - \sqrt{3} + 1}\right)^{\frac{1}{2}} = \left(\frac{2\sqrt{3}}{2}\right)^{\frac{1}{2}} = (\sqrt{3})^{\frac{1}{2}}$
 $= \sqrt[4]{3}$

Cevap: B

$$45. \frac{\sqrt{36}}{\sqrt{\frac{16}{100}} + \sqrt{\frac{36}{100}}} = \frac{6}{\frac{4}{10} + \frac{6}{10}} = 6$$

Cevap: A

$$46. \frac{x}{y} = 4 \Rightarrow \frac{y}{x} = \frac{1}{4}$$

$$\left(\frac{1}{4}\right)^{\frac{1}{n}} = 32 \Rightarrow 2^{-\frac{2}{n}} = 2^5$$

$$\Rightarrow -\frac{2}{n} = 5$$

$$\Rightarrow n = -\frac{2}{5}$$

Cevap: A

$$47. \frac{3^{a-b}}{3^{b-a}} = 9 \Rightarrow 3^{2a-2b} = 9$$

$$\Rightarrow 3^{2(a-b)} = 3^2$$

$$\Rightarrow a-b = 1$$

$$a^2 - b^2 = 45 \Rightarrow \underbrace{(a-b)}_1 \underbrace{(a+b)}_{45} = 45$$

$$a+b = 45$$

$$+ a-b = 1$$

$$\hline 2a = 46$$

$$a = 23 \Rightarrow b = 22$$

$$a.b = 506$$

Cevap: D

$$48. 44.2^x + 16.2^x = 480$$

$$60.2^x = 480$$

$$2^x = 8 \Rightarrow x = 3$$

Cevap: C

$$49. \frac{1}{x} + \frac{x-1}{x} + \frac{x+1}{x+2} = \frac{4}{3}$$

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

$$\frac{x+1}{x+2} = \frac{1}{3}$$

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

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

Cevap: B

$$50. \frac{1}{a} + \frac{1}{b} = 6 \Rightarrow \frac{a+b}{a.b} = 6 \quad (a+b=2)$$

$$\Rightarrow \frac{2}{a.b} = 6 \Rightarrow a.b = \frac{1}{3}$$

Cevap: E

$$51. 2 = \frac{1 - \frac{1}{x}}{1 + \frac{1}{x}} = \frac{\frac{x-1}{x}}{\frac{x+1}{x}} = \frac{x-1}{x+1} \cdot \frac{x}{x}$$

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

$$2x+2 = x-1$$

$$x = -3$$

Cevap: E

$$52. \left(x^2 - \frac{4}{x^2}\right) \cdot \left(\frac{x}{3x+2}\right) = \frac{x^2+2}{x}$$

$$\Rightarrow \left(\frac{x^4-4}{x^2}\right) \cdot \left(\frac{x}{3x+2}\right) \cdot \left(\frac{x}{x^2+2}\right) = 1$$

$$\Rightarrow \left(\frac{(x^2-2)(\cancel{x^2+2})}{x^2}\right) \cdot \left(\frac{\cancel{x}}{3x+2}\right) \cdot \left(\frac{\cancel{x}}{\cancel{x^2+2}}\right) = 1$$

$$\Rightarrow x^2 - 2 = 3x + 2$$

$$\Rightarrow x^2 - 3x - 4 = 0$$

$$\Rightarrow (x-4)(x+1) = 0$$

$$\Rightarrow x = 4 \vee x = -1 \quad (x > 0)$$

$$x = 4$$

Cevap: B

$$53. g(x) = x^3 \cdot \left(2 \cdot \frac{1}{x^3} - 3 \cdot \frac{1}{x^2} + 5 \cdot \frac{1}{x} - 3 \right)$$

$$\Rightarrow g(x) = 2 - 3x + 5x^2 - 3x^3$$

$$\Rightarrow g(2) = 2 - 6 + 20 - 24$$

$$\Rightarrow g(2) = -8$$

Cevap: A

$$54. f(g(x)) = f(x) \cdot g(x)$$

$$\Rightarrow 2g(x) + 3 = (2x + 3) \cdot g(x)$$

$$\Rightarrow 2g(1) + 3 = 5g(1)$$

$$\Rightarrow 3g(1) = 3$$

$$\Rightarrow g(1) = 1$$

Cevap: C

$$55. P(x) \mid x-4 \quad P(4) = 12$$

$$\frac{\quad}{12}$$

$$Q(x) \mid x-6 \quad Q(6) = k$$

$$\frac{\quad}{k}$$

$$P(x) = Q(x+2) \cdot (x+2)$$

$$x = 4 \text{ için}$$

$$P(4) = Q(6) \cdot 6$$

$$12 = k \cdot 6 \Rightarrow k = 2$$

Cevap: D

$$56. 1 + \frac{8}{1 + \sqrt{a}} = \sqrt{a}$$

$$1 + \sqrt{a} + 8 = \sqrt{a} + a$$

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

Cevap: C

$$57. \frac{6! + 7!}{5!(3! + 4!)} = \frac{6!(1 + 7)}{5!(6 + 24)}$$

$$= \frac{6 \cdot 8}{30} = \frac{48}{30}$$

$$= \frac{8}{5} \text{ bulunur.}$$

Cevap: B

$$58. a, b \in \mathbb{Z}$$

$$3 < \frac{a+3}{2} < 4 < b-a < 6$$

$$\bullet \quad 6 < a+3 < 8$$

$$+ \quad -3 \quad -3 \quad -3$$

$$3 < a < 5 \Rightarrow a = 4 \text{ olur.}$$

$$\bullet \quad 4 < b-a < 6$$

$$\downarrow$$

$$4$$

$$8 < b < 10 \Rightarrow b = 9 \text{ olur.}$$

$$\text{O halde } a + b = 4 + 9 = 13 \text{ bulunur.}$$

Cevap: D

$$59. 1) \left| \frac{a}{b} - 2 \right| = 3$$

$$\bullet \quad \frac{a}{b} - 2 = 3$$

$$\frac{a}{b} = 5$$

$$a = 5b$$

$$a = 5k, b = k$$

$$\bullet \quad \frac{a}{b} - 2 = -4$$

$$\frac{a}{b} = -2 \text{ olamaz}$$

$$(a < s < 0 \text{ olduğundan})$$

$$2) |a - b + 1| = 7$$

$$\bullet \quad a - b + 1 = 7$$

$$a - b = 6$$

$$5k - k = 6$$

$$4k = 6$$

$$k = \frac{3}{2} \text{ olamaz.}$$

$$(a < k < 0)$$

$$\bullet \quad a - b + 1 = -7$$

$$a - b = -8$$

$$5k - k = -8$$

$$4k = -8$$

$$k = -2$$

$$\text{O halde } a = 5k = -10,$$

$$b = k = -2$$

$$a \cdot b = (-10) \cdot (-2) = 20 \text{ bulunur.}$$

Cevap: E

$$60. \quad \begin{array}{r} 1B9 \mid A6 \\ - \quad \quad \quad 6 \\ \hline 3 \end{array} \quad 1B9 = (A6) \cdot 6 + 3$$

Bölme işleminde $A = 2$ 'dir.

Çünkü $A = 1$ alırsak $3 + 16 \cdot 6 = 99$

$A = 3$ alırsak $3 + 36 \cdot 6 = 219$ olur.

$A = 2$ için

$3 + 26 \cdot 6 = 159$ olacağından

$B = 5$

O halde $A + B = 2 + 5 = 7$ bulunur.

Cevap: D

$$61. \quad \frac{a}{b} = \frac{1}{4} \quad \frac{c}{d} = \frac{1}{4}$$

$$b = 4a \quad d = 4c$$

$$\begin{aligned} \frac{a+b}{b} \cdot \frac{c+d}{d} &= \frac{a+4a}{4a} \cdot \frac{c+4c}{4c} \\ &= \frac{5a}{4a} \cdot \frac{5c}{4c} \\ &= \frac{25}{16} \text{ bulunur.} \end{aligned}$$

Cevap: E

$$62. \quad a > b$$

$$(a - b)! = 1 \Rightarrow a - b = 0 \text{ veya } a - b = 1$$

$$a = b \quad a = b + 1 \text{ olur.}$$

olamaz.

a yerine $b + 1$ yazalım.

$$\frac{(b+1)!}{b!} + \frac{b!}{(b+1)!} = \frac{82}{9}$$

$$\frac{(b+1)b!}{b!} + \frac{b!}{(b+1)!} = \frac{82}{9}$$

$$(b+1) + \frac{1}{(b+1)} = 9 + \frac{1}{9} \text{ olur.}$$

$$b + 1 = 9$$

$$b = 8 \text{ ve } a = b + 1 = 8 + 1$$

$$a = 9$$

O halde

$$a + b = 8 + 9 = 17 \text{ bulunur.}$$

Cevap: C

$$63. \quad \text{I. } (\sqrt{x} - \sqrt{y})^2 = (\sqrt{z+6})^2$$

$$x + y - 2\sqrt{x \cdot y} = z + 6$$

$$\text{II. } (\sqrt{x} + \sqrt{y})^2 = (\sqrt{z+14})^2$$

$$x + y + 2\sqrt{xy} = z + 14$$

I ve II'den

$$-1/x + y - 2\sqrt{xy} = z + 6$$

$$+ \quad x + y + 2\sqrt{xy} = z + 14$$

$$4\sqrt{xy} = 8$$

$$\sqrt{xy} = 2$$

$$\sqrt{xy} = \sqrt{z} = 2 \Rightarrow z = 4 \text{ olur.}$$

O halde

$$x + y - 2\sqrt{xy} = 4 + 6 = 10$$

$$+ \quad x + y + 2\sqrt{xy} = 4 + 14 = 18$$

$$2(x + y) = 28$$

$$x + y = 14 \text{ bulunur.}$$

Cevap: D

$$64. \quad (a + 3b)^2 = 12a \cdot b$$

$$a^2 + 9b^2 + 6ba = 12ab$$

$$a^2 - 6ab + 9b^2 = 0$$

$$(a - 3b)^2 = 0 \Rightarrow a - 3b = 0$$

$$a = 3b$$

$$3 \cdot 3b + 5b = 28$$

$$9b + 5b = 28$$

$$14b = 28$$

$$b = 2$$

$$a = 3b \Rightarrow a = 6$$

$$\text{O halde } a + b = 6 + 2 = 8 \text{ bulunur.}$$

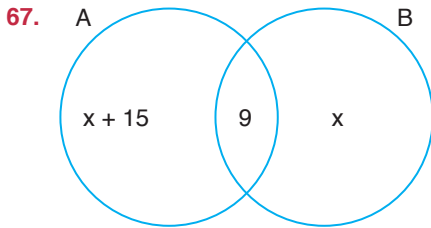
Cevap: B

65. $a \cdot b = -6$
 $+ \quad b \cdot c = 12$
 $\hline b(a + c) = 6$
 $a + c = \frac{6}{b}$
 $a + b + c = 5$
 $b + \frac{6}{b} = 5$
 $b^2 + 6 = 5b \Rightarrow b^2 - 5b - 6 = 0$
 $(b - 3)(b + 2) = 0$
 $b = 3$ veya $b = -2$ olur.
 $b = 3$ için $a \cdot 3 = -6 \Rightarrow a = -2$
 $b = -2$ için $a \cdot (-2) = -6 \Rightarrow a = 3$
 $2 \cdot c = 12 \Rightarrow c = 6$
 $3 \cdot c = 12 \Rightarrow c = 4$
 Bu durumda
 $a < b < c$ olmaktadır.

Cevap: A

66. $B \ B \ 5$
 $+ \quad C \ A \ B$
 $\hline A \ 9 \ A$
 $B = 2$ seçilirse $A = 7$ olur.
 $B + A = 9$ olacak şekilde
 $B + C = A$
 $2 + C = 7 \Rightarrow C = 5$
 O halde $A + B + C = 7 + 2 + 5 = 14$ bulunur.

Cevap: C



- $s(B \setminus A) = x$ olsun. $s(A \setminus B) = x + 15$ olur.
 $s(A \cup B) = 40$
 $2x + 24 = 40$
 $2x = 16$
 $x = 8$
 $s(A) = x + 24$
 $= 8 + 24 = 32$ bulunur.

Cevap: E

68. $x = 0$ için
 $P(0) = 0 + 0 + 6$
 $P(0) = (-1) \cdot \underbrace{Q(0)}_4 + 7$
 $P(0) = 3$
 $3 = b$ olur.
 $x = 1$ için
 $P(1) = a + 1 + b$
 $P(1) = \underbrace{0 \cdot Q(1)}_0 + 7$
 $7 = a + 1 + b$
 $7 = a + 1 + 3$
 $3 = a$
 O halde $a \cdot b = 3 \cdot 3 = 9$ bulunur.

Cevap: E

69. $f^{-1}(g(x)) = x^2 + 5x + a$
 $x = 3$ için $f^{-1}(g(3)) = 3^2 + 5 \cdot 3 + a$
 $f^{-1}(f(2)) = 9 + 15 + a$
 $2 = 24 + a$
 $a = -22$

Cevap: C

70. $|x - 2| + |4 - 2x| < 15$
 $3|x - 2| < 15$
 $|x - 2| < 5$
 $-5 < x - 2 < 5$
 $-3 < x < 7$
 $\text{ÇK(SS)} : (-3, 7)$

Cevap: E

71. $\frac{A(ABC)}{A(ABD)} = \frac{24}{6} = 4$ olur.

$$A(ADC) = 4 \cdot A(ABD)$$

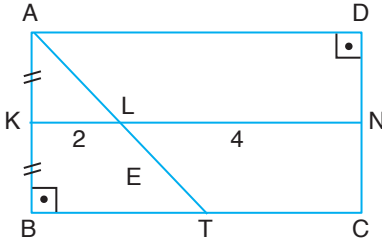
$$\frac{A(ABC)}{A(ABD)} = \frac{A(ABD) + A(ADC)}{A(ABD)}$$

$$= \frac{A(ABD) + 4 \cdot A(ABD)}{A(ABD)} = \frac{5A(ABD)}{A(ABD)}$$

$$= 5$$

Cevap: C

72.



$$AKL \sim ABT \Rightarrow (A.A.A)$$

$$\frac{|AK|}{|AB|} = \frac{|KL|}{|BT|}$$

$$\frac{|AK|}{2 \cdot |AK|} = \frac{2}{|BT|} \Rightarrow BT = 4 \text{ br}$$

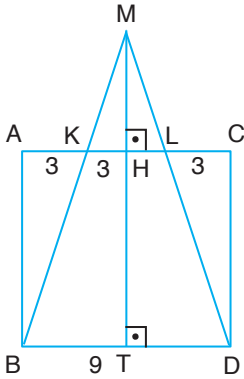
o halde

$$\frac{A(ABT)}{A(ABCD)} = \frac{\frac{|AB| \cdot |BT|}{2}}{|AB| \cdot |BC|} = \frac{\frac{|AB| \cdot 4}{2}}{|AB| \cdot 6}$$

$$= \frac{|AB| \cdot 4}{2} \cdot \frac{1}{|AB| \cdot 6} = \frac{1}{3} \text{ bulunur.}$$

Cevap: B

73.



$$|BD| = |AC| = 9 \text{ cm}$$

$$|AK| = |KL| = |LC| = 3 \text{ cm}$$

MKL ~ MBC üçgenleri benzerdir.

$$\frac{|KL|}{|BC|} = \frac{|MH|}{|MT|} \Rightarrow \frac{3}{9} = \frac{|MH|}{|MT|} \Rightarrow \frac{|MH|}{|MT|} = \frac{1}{3}$$

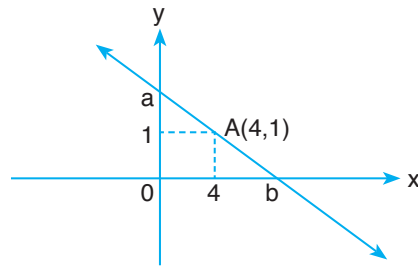
$$\frac{|MH|}{|MH| + 9} = \frac{1}{3}$$

$$3 \cdot |MH| = |MH| + 9$$

$$2|MH| = 9 \Rightarrow |MH| = 4,5 \Rightarrow A(\widehat{MKL}) = \frac{|KL| \cdot |MH|}{2} = \frac{3 \cdot (4,5)}{2} = \frac{27}{4} \text{ cm}^2$$

Cevap: D

74.



Bu doğrunun denklemini bulalım.

(0, a) ve (b, 0)

$$\frac{y-a}{0-a} = \frac{x-0}{b-0}$$

$$b(y-a) = a \cdot x$$

$$b \cdot y - ba = -ax$$

ax + by - ba = 0 bu doğru (4, 1) noktasından geçtiğine göre, x = 4, y = 1

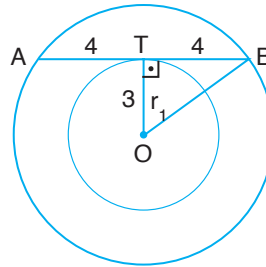
$$4a + b - ab = 0$$

$$\text{O halde } (1-a)(b-4) = b-4-ab+4a$$

$$= \underbrace{4a + b - ab - 4}_{0} = -4 \text{ bulunur.}$$

Cevap: A

75.



TOB üçgeninden

$$|OB|^2 = |OT|^2 + |TB|^2$$

$$|OB|^2 = 3^2 + 4^2$$

$$= 9 + 16 = 25$$

$$|OB| = 5 \text{ cm} = r_2$$

$$\text{Taralı Alan} = \pi(r_2^2 - r_1^2) = \pi(5^2 - 3^2)$$

$$= 16 \cdot \pi \text{ cm}^2$$

Cevap: E

