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. $A \equiv 4$, $M \equiv 2$, $V \equiv 5$, $İ \equiv 8$

$MAVİ \equiv 2458$

Cevap: D

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

$\bigcirc \blacktriangle \square \triangle = 4635$

Cevap: B

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

Cevap: D

6. $y.z = 2x.y$ $\qquad$ $x.z = 3z$

$\underline{z = 2x}$ $\qquad$ $x.2x = 32$

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

Cevap: D

7.

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

+	a	b	c
a		6	
b			10
c			

$a.b = b^3$ $\qquad$ $b.c = b^4$

$\underline{a = b^2}$ $\qquad$ $\underline{c = b^3}$

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

Cevap: E

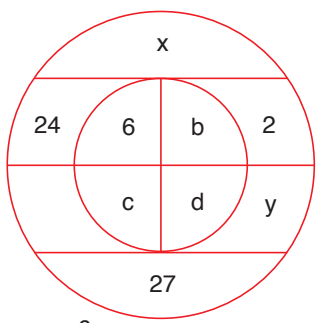
8. $1 \otimes (3 \otimes 2) = 1 \otimes (3^2 - 5)$

$= 1 \otimes 4$

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

Cevap: C

9.



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

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

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

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

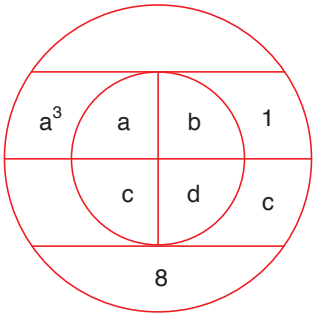
$y = 3.3 \Rightarrow y = 9$

$x + y = \underline{\underline{10}}$

Cevap: B

Diğer Sayfaya Geçiniz.

10.



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

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

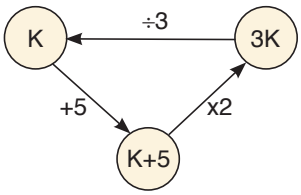
$b.c = c \Rightarrow b = 1$

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

$\Rightarrow d = 9$

Cevap: C

11.

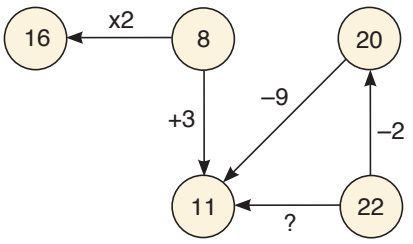


$\Rightarrow 2(K + 5) = 3K$

$\Rightarrow K = 10$

Cevap: A

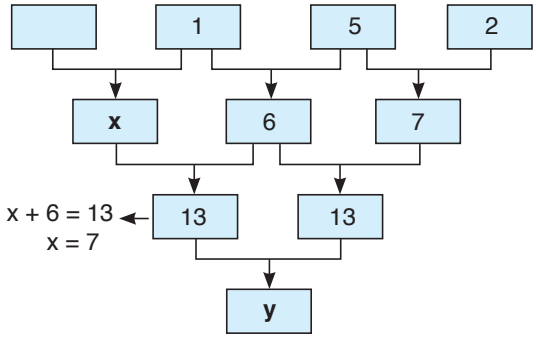
12.



$? \equiv \div 2$

Cevap: E

13.



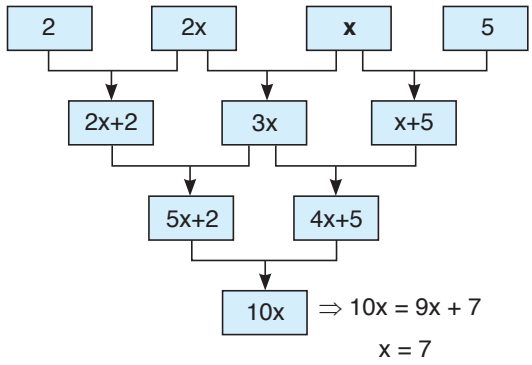
$y = 13 + 13$

$y = 26$

$x + y = 33$

Cevap: C

14.

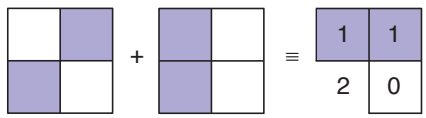


$\Rightarrow 10x = 9x + 7$

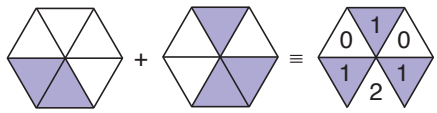
$x = 7$

Cevap: C

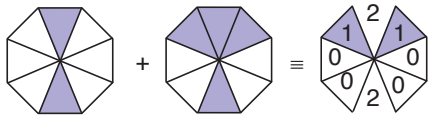
15. I.



II.

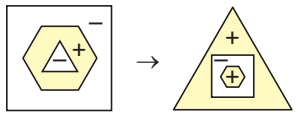


III.

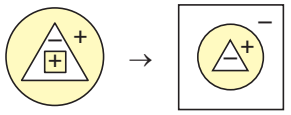


Cevap: B

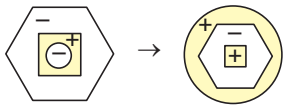
16. I.



II.



III.



Cevap: D

17.

			
I.	$\underbrace{+++}_{3}$	$\underbrace{++}_{2}$	$\underbrace{+++}_{3}$
II.	$\underbrace{---}_{3}$	$\underbrace{\begin{matrix}---\\---\end{matrix}}_{6}$	$\underbrace{-----}_{5}$
III.	3 + 3 = 6	2 + 6 = 8	3 + 5 = 8

x = 6 , y = 6 , z = 3

$\Rightarrow$ x + y + z = 15

Cevap: D

18.

3	0	4	49	$\rightarrow 3+0+4=7$, $7^2=49$
2	1	**?**	36	$\rightarrow 2+1+?=6$, $6^2=36$
4	2	5	121	$\rightarrow 4+2+5=11$, $11^2=121$
2	2	6	100	$\rightarrow 2+2+6=10$, $10^2=100$

? $\equiv$ 3

Cevap: C

19.

4	6	**x**	2
24	18	40	14
6	3	5	7

4.6 = 24

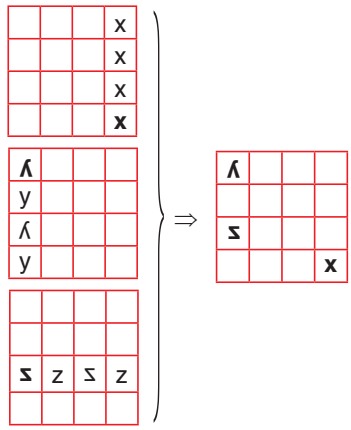
6.3 = 18

x.5 = 40 $\Rightarrow$ x = 8 $\Rightarrow$ x^2 = 64

2.7 = 14

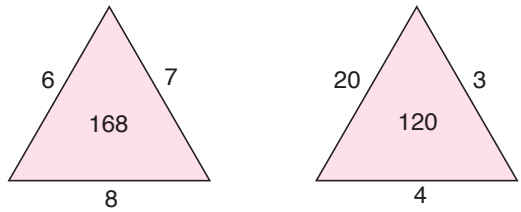
Cevap: A

20.

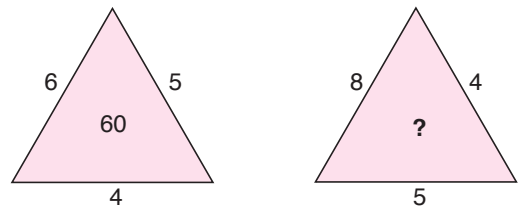


Cevap: B

21.



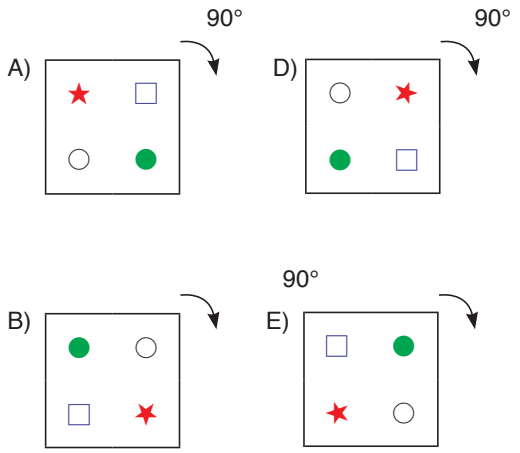
$\frac{6.7.8}{2} = 168$ $\qquad$ $\frac{20.3.4}{2} = 120$



$\frac{6.5.4}{2} = 60$ $\qquad$ $\frac{8.4.5}{2} = 80$

Cevap: C

22.

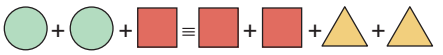


Cevap: C

Diğer Sayfaya Geçiniz.

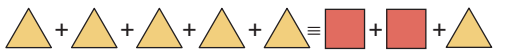
23. I. 

$\Rightarrow$ 

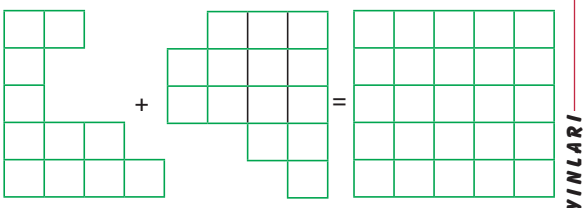
II. 

$\Rightarrow$ 

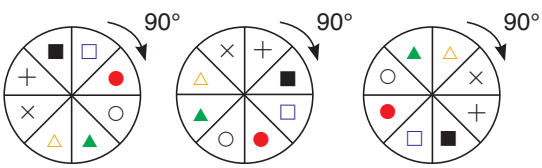
III. 

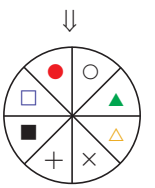
$\Rightarrow$ 

Cevap: E

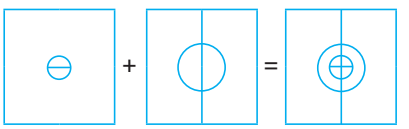
24. 

Cevap: C

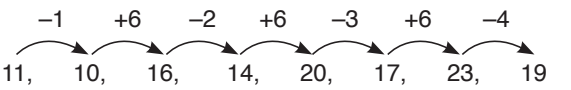
25. 



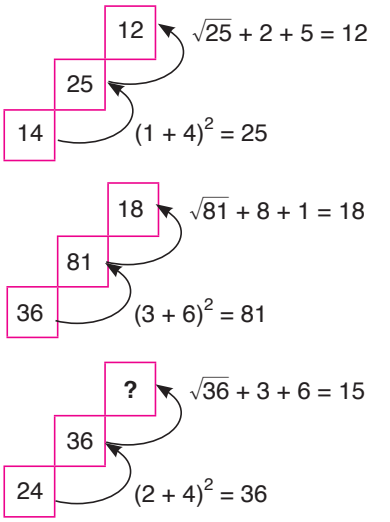
Cevap: D

26. 

Cevap: B

27. 

Cevap: D

28. 

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. $\triangle\triangle\bigcirc\square \equiv \square\square\bigcirc\bigcirc$

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

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

$\Rightarrow \bigcirc\bigcirc \equiv \underline{\triangle\triangle\square}$ ①

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

$\Rightarrow \bigcirc \equiv \square\square$ ②

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

①, ②

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

$\Rightarrow ? \equiv \square$

Cevap: A

31. I. $\bigcirc\square\square \equiv \triangle\triangle\bigcirc$

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

① $\Rightarrow \square\bigcirc\square\square \equiv \bigcirc\bigcirc\bigcirc\bigcirc$

$\Rightarrow \square \equiv \bigcirc$

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

Cevap: A

32. I.

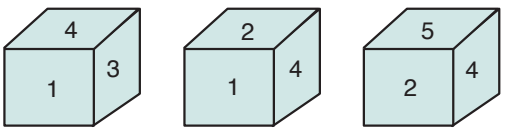
A			✱		
A		$\equiv$	✱	$\Rightarrow$	A ≡ ✱
B	B		△	△	B ≡ △

II.

△	C		△	○	C ≡ ○
△	D	$\equiv$	△	□	$\Rightarrow$ D ≡ □

Cevap: C

33.



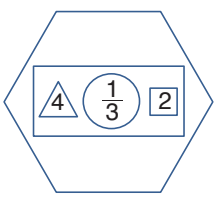
I. II. III.

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.

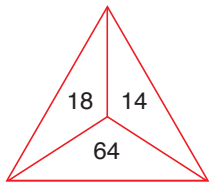


$\rightarrow 6.\left(3.4 + \frac{1}{\frac{1}{3}} + 2^4\right)$

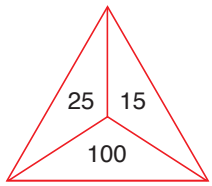
$= 6.(12 + 3 + 16) = 186$

Cevap: A

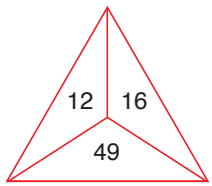
35.



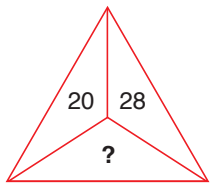
$\left(\frac{18+14}{4}\right)^2 = 64$



$\left(\frac{25+15}{4}\right)^2 = 100$



$\left(\frac{12+16}{4}\right)^2 = 49$



$\left(\frac{20+28}{4}\right)^2 = 144$

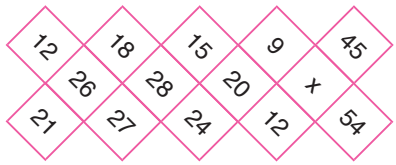
Cevap: E

36.

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

Cevap: B

37.



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

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

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

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

Cevap: E

Diğer Sayfaya Geçiniz.

38. $112 \to 1^2 + 1^2 + 2^2 = 1 + 1 + 4 = 6$

$235 \to 2^2 + 3^2 + 5^2 = 4 + 9 + 25 = 38$

$423 \to 4^2 + 2^2 + 3^2 = 16 + 4 + 9 = 29$

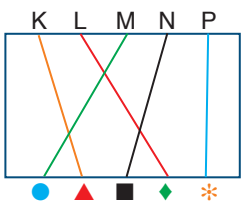
$712 \to 7^2 + 1^2 + 2^2 = 49 + 1 + 4 = 54$

Cevap: A

39.

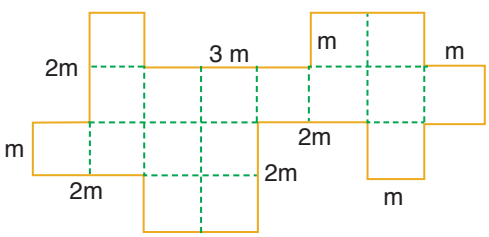
I. şekilden	II. şekilden	III. şekilden
● → 3	1 → N	K → ▲
▲ → 4	2 → P	L → ♦
■ → 1	3 → M	M → ●
♦ → 5	4 → K	N → ■
✻ → 2	5 → L	P → ✻

O halde



Cevap: C

40.



Çevre = 28 m bulunur.

Cevap: E

41.

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

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

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

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

Cevap: C

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

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

$$\max\left(\frac{a}{b}\right)=\frac{7}{\frac{1}{8}}=7.8=56$$

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

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

$$\Rightarrow a-b=1$$

$$a^2-b^2=45 \Rightarrow \underbrace{(a-b)}_{1}\underbrace{(a+b)}_{45}=45$$

$$\begin{array}{r} a+b=45 \\ +\ a-b=1 \\ \hline 2a=46 \end{array}$$

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

$$a.b=506$$

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

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

Cevap: E

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

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

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

$$x=-3$$

Cevap: E

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

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

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

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

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

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

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

$$x=4$$

Cevap: B

Diğer Sayfaya Geçiniz.

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

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

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

$\Rightarrow g(2) = -8$

Cevap: A

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

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

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

$\Rightarrow 3g(1) = 3$

$\Rightarrow g(1) = 1$

Cevap: C

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

$-$ $\quad 12$

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

$-$ $\quad k$

$P(x) = Q(x + 2).(x + 2)$

$x = 4$ için

$P(4) = Q(6).6$

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

Cevap: D

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

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

$a = 9$ bulunur.

Cevap: C

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

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

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

Cevap: B

58. $a, b \in Z$

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

- $6 < a + 3 < 8$

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

$3 < a < 5 \Rightarrow a = 4$ olur.

- $4 < b - a < 6$

$\downarrow$

4

$8 < b < 10 \Rightarrow b = 9$ olur.

O halde $a + b = 4 + 9 = 13$ bulunur.

Cevap: D

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

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

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

$a = 5b$

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

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

(a < s < 0 olduğundan)

$a = 5k, b = k$

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

- $a - b + 1 = 7$

$a - b = 6$

$5k - k = 6$

$4k = 6$

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

$(a < k < 0)$

- $a - b + 1 = -7$

$a - b = -8$

$5k - k = -8$

$4k = -8$

$k = -2$

O halde $a = 5k = -10$, $b = k = -2$

$a \,.\, b = (-10).(-2) = 20$ bulunur.

Cevap: E

60. $1B9 \mid A6$ $\quad 1B9 = (A6) \cdot 6 + 3$

$-\ \underline{\quad\ \mid 6}$

$\quad 3$

Bölme işleminde A = 2'dir.

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

$\quad$ A = 3 alırsak $\quad 3 + 36.6 = 219$ olur.

A = 2 için

$\quad 3 + 26 \cdot 6 = 159$ olacağından

B = 5

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

Cevap: D

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

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

$$\frac{a+b}{b} \cdot \frac{c+d}{d} = \frac{a+4a}{4a} \cdot \frac{c+4c}{4c}$$

$$= \frac{5a}{4a} \cdot \frac{5c}{4c}$$

$$= \frac{25}{16} \text{ bulunur.}$$

Cevap: E

62. $a > b$

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

$\quad a = b \qquad a = b + 1$ olur.

$\quad$ olamaz.

a yerine b + 1 yazalım.

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

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

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

$b + 1 = 9$

$b = 8$ ve $a = b + 1 = 8 + 1$

$a = 9$

O halde

$a + b = 8 + 9 = 17$ bulunur.

Cevap: C

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

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

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

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

I ve II'den

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

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

$4\sqrt{xy} = 8$

$\sqrt{xy} = 2$

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

O halde

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

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

$2(x + y) = 28$

$x + y = 14$ bulunur.

Cevap: D

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

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

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

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

$a = 3b$

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

$9b + 5b = 28$

$14b = 28$

$b = 2$

$a = 3b \Rightarrow a = 6$

O halde a + b = 6 + 2 = 8 bulunur.

Cevap: B

Diğer Sayfaya Geçiniz.

65.

$$\begin{array}{rl} & a \cdot b = -6 \\ + & b \cdot c = 12 \\ \hline & b(a+c) = 6 \end{array}$$

$$a + c = \frac{6}{b}$$

$a + b + c = 5$

$$b + \frac{6}{b} = 5$$

$$b^2 + 6 = 5b \Rightarrow \quad b^2 - 5b - 6 = 0$$

$$(b-3)(b-2) = 0$$

$b = 2$ veya $b = 3$ olur.

$\underline{b = 2}$ için: $a \cdot 2 = -6 \Rightarrow a = -3$; $2 \cdot c = 12 \Rightarrow c = 6$

$\underline{b = 3}$ için: $a \cdot 3 = -6 \Rightarrow a = -2$; $3 \cdot c = 12 \Rightarrow c = 4$

Bu durumda

$a < b < c$ olmaktadır.

Cevap: A

66.

$$\begin{array}{rl} & B\ B\ 5 \\ + & C\ A\ B \\ \hline & A\ 9\ A \end{array}$$

$B = 2$ seçilirse $A = 7$ olur.

$B + A = 9$ olacak şekilde

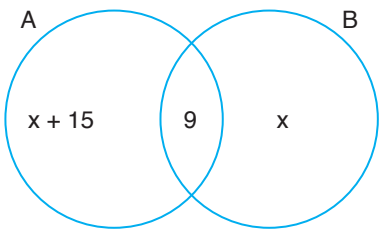
$B + C = A$

$2 + C = 7 \Rightarrow C = 5$

O halde $A + B + C = 7 + 2 + 5 = 14$ bulunur.

Cevap: C

67.



$s(B \setminus A) = x$ 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. $|x - 2| + |4 - 2x| < 15$

$3|x - 2| < 15$

$|x - 2| < 5$

$-5 < x - 2 < 5$

$-3 < x < 7$

ÇK(SS) : $(-3, 7)$

Cevap: E

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

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

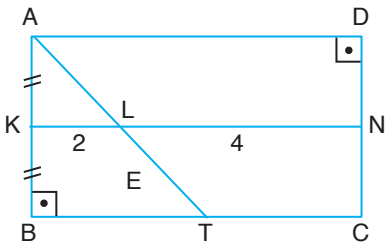
$$\frac{A(ABC)}{A(ABD)} = \frac{A(ABD) + A(ADC)}{A(ABD)}$$

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

$= 5$

Cevap: C

72.



AKL ~ ABT ⇒ (A.A.A)

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

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

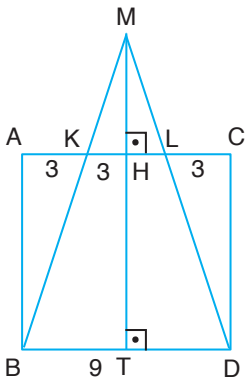
o halde

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

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

Cevap: B

73.



$|BD| = |AC| = 9$ cm

$|AK| = |KL| = |LC| = 3$ cm

MKL ~ MBC üçgenleri benzerdir.

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

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

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

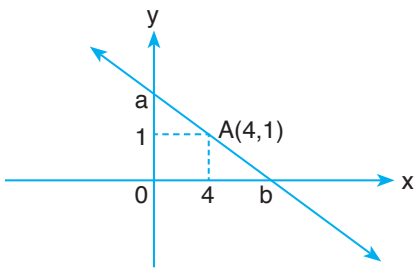
$2|MH| = 9 \Rightarrow |MH| = 4{,}5 \Rightarrow A(\widehat{MKL}) = \frac{|KL|\cdot|MH|}{2}$

$$= \frac{3\cdot(4{,}5)}{2}$$

$$= \frac{27}{4} \text{ cm}^2$$

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, $x = 4$, $y = 1$

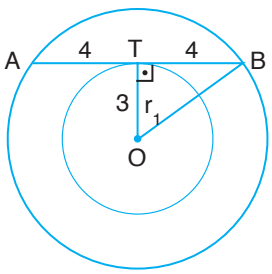
$4a + b - ab = 0$

O halde $(1 - a)(b - 4) = b - 4 - ab + 4a$

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

Cevap: A

75.



TOB üçgeninden

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

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

$= 9 + 16 = 25$

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

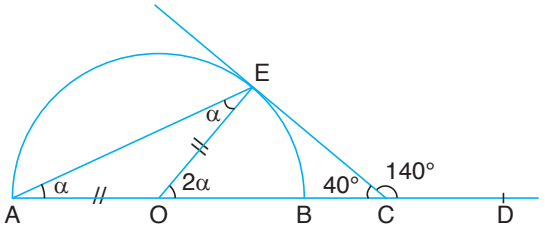
Taralı Alan $= \pi(r_2^2 - r_1^2) = \pi(5^2 - 3^2)$

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

Cevap: E

Diğer Sayfaya Geçiniz.

76.

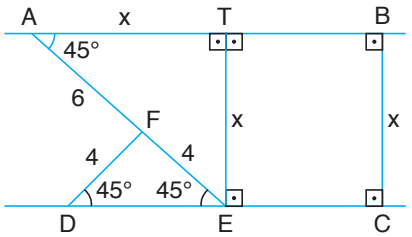


$90 + 2\alpha + 40 = 180$

$\alpha = 25$

Cevap: A

77.



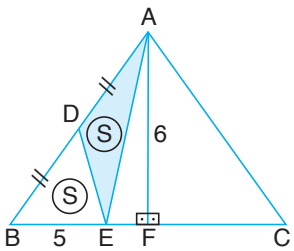
$x^2 + x^2 = 100$

$x^2 = 50$

$x = 5\sqrt{2}$

Cevap: B

78.



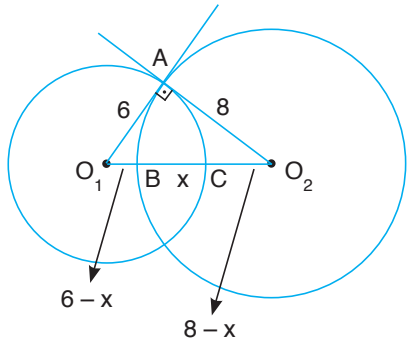
$A(ABE) = 2S = \frac{6.5}{2}$

$\Rightarrow 2S = 15$

$S = \frac{15}{2}$

Cevap: E

79.



$|O_1O_2|^2 = 6^2 + 8^2$

$|O_1O_2| = 10$ br

$|BC| = x$br $\Rightarrow |O_1B| = (6 - x)$ br

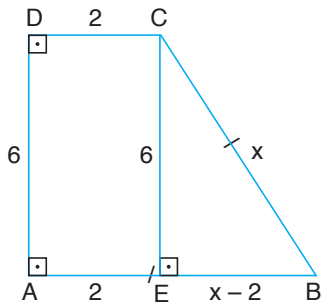
$|O_2C| = (8 - x)$ br

$|O_1O_2| = |O_1B| + |BC| + |O_2C|$

$10 = 6 - x + x + 8 - x \Rightarrow x = 4$ br

Cevap: B

80.



$x^2 = (x - 2)^2 + 6^2$

$x^2 = x^2 - 4x + 4 + 36$

$4x = 40$

$x = 10$ br

Cevap: E