

1.

|   |    |   |    |
|---|----|---|----|
| + | a  | b | c  |
| a |    |   |    |
| b | 20 | c | 54 |
| c |    |   |    |

$c - a = ?$

Tabloya göre

$b + a = 20$

$b + b = c \Rightarrow 2b = c$

$b + c = 54$

i)  $b + 2b = 54$

$3b = 54$

$b = 18 \Rightarrow c = 2b = 2 \cdot 18 = 36$

ii)  $b + a = 20$

$18 + a = 20$

$a = 2$

O halde  $c - a = 36 - 2 = 34$  bulunur.

3.

|   |    |   |    |
|---|----|---|----|
| + | a  | b | c  |
| a |    |   | 12 |
| b | 15 |   |    |
| c |    | a |    |

Tablodan;  $a + c = 12$ ,  $b + a = 15$ ,  $c + b = a$ 

$$\begin{array}{r} a + c = 12 \\ + \quad b + a = 15 \\ \hline 2a + b + c = 27 \\ \quad \quad \quad \underbrace{\quad}_{a} \\ 3a = 27 \\ a = 9 \text{ bulunur.} \end{array}$$

Cevap: C

Cevap: A

TASARI EĞİTİM YAYINLARI

2.

|   |   |    |    |
|---|---|----|----|
| + | a | b  | c  |
| a |   |    |    |
| b |   | 20 | 3a |
| c | b |    |    |

$a, b, c \in \mathbb{Z}^+ \Rightarrow a = ?$

Toplam tablosundan,

i)  $c + a = b$

$c + a = 10$

ii)  $b + b = 20$

$2b = 20$

$b = 10$

iii)  $b + c = 3a$

$10 + c = 3a$

$3a - c = 10$

•  $3a - c = 10$

$+ \quad a + c = 10$

$\hline 4a = 20$

$a = 5 \text{ bulunur.}$

Cevap: D

4.

|   |      |      |
|---|------|------|
| x | a    | b    |
| a | a+12 |      |
| b |      | 6a+1 |

$b = ?$

Tablodan

$a \cdot a = a + 12$

$a^2 = a + 12$

$a^2 - a = 12$

$a(a - 1) = 12$

$$\begin{array}{l} \downarrow \\ 4 \end{array} \quad \begin{array}{l} \downarrow \\ 3 \end{array}$$

$b \cdot b = 6a + 1$

$b^2 = 6 \cdot 4 + 1$

$b^2 = 24 + 1 = 25$

$b = 5$

Cevap: B

5.

|   |     |     |     |    |
|---|-----|-----|-----|----|
| X | a   | b   | c   | d  |
| a |     | 6.d |     |    |
| b |     |     |     |    |
| c | 3.a |     | 9.a | 12 |
| d |     |     |     |    |

$$a + b + c + d = ?$$

$$\begin{aligned} \text{i) } a \cdot c &= 3 \cdot a \\ c &= 3 \end{aligned}$$

$$\begin{aligned} \text{ii) } c \cdot c &= 9a \\ c^2 &= 9 \cdot a \\ 3^2 &= 9 \cdot a \Rightarrow a = 1 \end{aligned}$$

$$\begin{aligned} \text{iii) } c \cdot d &= 12 \\ 3 \cdot d &= 12 \\ d &= 4 \end{aligned}$$

$$\begin{aligned} \text{iv) } a \cdot b &= 6 \cdot d \\ 1 \cdot b &= 6 \cdot 4 \\ b &= 24 \end{aligned}$$

$$a + b + c + d = 1 + 24 + 3 + 4 = 32$$

Cevap: E

6.  $a \times c = a \cdot c$ 

|   |      |   |      |
|---|------|---|------|
| x | a    | b | c    |
| a |      | c |      |
| b |      |   | 36.a |
| c | 25.b |   |      |

$$\begin{aligned} a, b, c > 0 \\ a + b + c &= ? \end{aligned}$$

$$a \cdot b = c$$

$$b \cdot c = 36 \cdot a$$

$$x \quad c \cdot a = 25 \cdot b$$

$$\hline a^2 \cdot b^2 \cdot c^2 = 36 \cdot 25 \cdot a \cdot b \cdot c$$

$$a \cdot b \cdot c = 36 \cdot 25$$

$$36 \cdot a$$

$$a^2 = 25 \Rightarrow a = 5$$

$$\text{i) } 5 \cdot b = c$$

$$\text{ii) } b \cdot 5 \cdot b = 36 \cdot 5$$

$$b^2 = 36 \Rightarrow b = 6$$

$$\text{iii) } c = 5 \cdot 6 = 30$$

O halde;

$$a + b + c = 5 + 6 + 30 = 41$$

Cevap: B

7.

|   |   |   |   |   |      |
|---|---|---|---|---|------|
| B | + | A | - | 2 | = 16 |
| x |   | x |   | + |      |
| 2 | + | B | - | C | = 4  |
| x |   | x |   | - |      |
| E | - | 8 | + | D | = 3  |

$\parallel$                        $\parallel$                        $\parallel$   
 64                      640                      1

$$\begin{aligned} A + B - 2 &= 16 &\Rightarrow A + B &= 18 \\ B - C + 2 &= 4 &\Rightarrow B - C &= 2 \\ E + D - 8 &= 3 &\Rightarrow E + D &= 11 \\ C - D + 2 &= 1 &\Rightarrow C - D &= -1 \end{aligned} \quad \begin{aligned} &> A + C = 16 \\ &> E + C = 10 \end{aligned}$$

$$\begin{aligned} A \times B \times 8 &= 640 &\Rightarrow A \times B &= 80 \\ B \times 2 \times E &= 64 &\Rightarrow B \times E &= 32 \end{aligned}$$

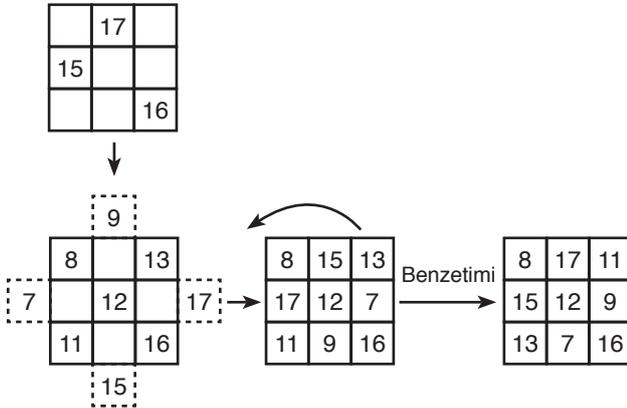
$$\begin{array}{cc} A \times B = 80 & B \times E = 32 \\ \downarrow \downarrow & \downarrow \downarrow \\ 10 \ 8 & 8 \ 4 \end{array}$$

$$A = 10, \quad B = 8, \quad C = 6, \quad D = 7, \quad E = 4$$

$$A - B + C + D - E = 10 - 8 + 6 + 7 - 4 = 11$$

Cevap: A

8.



Ortadaki sayı 12'dir veya sayıları topla

$$7 + 8 + 9 + 11 + 12 + 13 + 15 + 16 + 17 = 108$$

$$3'e \text{ böl } \frac{108}{3} = 36 \text{ (bir satır, sütun ve köşegen toplam)}$$

bir daha 3'e böl çıkan sonucu tam ortadaki sayı bulunur.

$$\frac{36}{3} = 12 \text{ bulunur.}$$

Cevap: B

9.

|   |     |       |
|---|-----|-------|
| + | ● ● | ▲     |
| ● |     | ● ● ● |
| ▲ | ■   |       |

$$\begin{aligned} \bullet + \blacktriangle &= \bullet \bullet \bullet \Rightarrow \blacktriangle = \bullet \bullet \\ \blacktriangle + \bullet \bullet &= \blacksquare \\ \blacktriangle + \blacktriangle + \blacksquare &= \underbrace{\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet}_{\blacksquare} \underbrace{\bullet \bullet \bullet}_{\blacktriangle \bullet \bullet} \end{aligned}$$

Cevap: E

10.

|   |     |       |
|---|-----|-------|
| + | ● ● | ■ ■   |
| ● |     | ▲ ▲ ▲ |
| ▲ | ■   |       |

$$\begin{aligned} \bullet + \blacksquare \blacksquare &= \blacktriangle \blacktriangle \blacktriangle \\ \blacktriangle + \bullet \bullet &= \blacksquare \\ \bullet &= x, \quad \blacksquare = y, \quad \blacktriangle = z \text{ olsun} \end{aligned}$$

$$x + 2y = 3z \quad \text{bize} \quad y + z = ?$$

$$z + 2x = y$$

Buradan

$$3z - 2y = x$$

$$2/ \quad y - z = 2x$$

$$3z - 2y = x$$

$$+ \quad 2y - 2z = 4x$$

$$z = 5x$$

$$3.5x - 2y = x$$

$$14x = 2y$$

$$7x = y$$

$$y + z = 7x + 5x = 12x \text{ yani 12 tane } \bullet \text{ olacak}$$

Cevap: E

11.

|   |   |    |    |    |
|---|---|----|----|----|
| x | a | b  | c  | d  |
| a |   |    | 18 |    |
| b | 8 |    |    |    |
| c |   |    |    | 36 |
| d |   | 16 |    |    |

$$a \times b \times c \times d = ?$$

$$a.c = 18$$

$$a.b = 8$$

$$c.d = 36$$

$$d.b = 16$$

$$a^2.b^2.c^2.d^2 = 2^2.3^2.6^2.8^2$$

$$a.b.c.d = 2.3.6.8$$

$$= 288$$

Cevap: C

12.

|   |   |   |   |   |
|---|---|---|---|---|
| + | 2 | 2 | 1 | 1 |
|   | 4 | 4 | 2 | 2 |
|   | 3 | 0 | 1 | 5 |
|   | 9 | 6 | 4 | ? |

İlk iki satırdaki sayıları topla son satırdaki sayıdan çıkar

$$9 - (4 + 2) = 3 \text{ (3. satırdaki sayı)}$$

$$6 - (4 + 2) = 0$$

$$4 - (1 + 2) = 1$$

$$x - (1 + 2) = 5 \Rightarrow x = 8$$

Cevap: E

13.

|       |   |    |   |   |
|-------|---|----|---|---|
| Topla | 7 | 10 | 9 | 6 |
|       | 5 | 1  | 3 | 7 |
|       | 2 | 3  | 2 | 1 |
| Çıkar | 4 | 12 | 8 | ? |

$$(I. \text{ satır} + III. \text{ satır}) - (IV. \text{ satır}) = III. \text{ satır}$$

$$(7 + 2) - 4 = 5$$

$$(10 + 3) - 12 = 1$$

$$(9 + 2) - 3 = 8$$

$$(6 + 1) - 7 = 0$$

Cevap: A

14.

|   |    |    |   |
|---|----|----|---|
| X | a  | b  | c |
| a |    | 24 |   |
| b |    |    | 6 |
| c | 36 |    |   |

$$a.b = 24, \quad b.c = 6, \quad c.a = 36$$

$$a.c.b^2 = 24.6$$

$$36$$

$$b^2 = 4 \Rightarrow b = 2, \quad c = 3 \text{ ve } a = 12 \text{ bulunur.}$$

Cevap: E

15.

|   |   |     |      |
|---|---|-----|------|
| + | a | b   | c    |
| a |   |     |      |
| b |   | 6-c |      |
| c |   | 5   | 2a-8 |

i)  $b + b = 6 - c \Rightarrow 2b + c = 6$

ii)  $b + c = 5$

iii)  $c + c = 2a - 8 \Rightarrow 2c = 2a - 8$

$2(a - c) = 8$

$a - c = 4$

i ve ii'den

$2b + c = 6$

$-/ \quad b + c = 5$

$2b + c = 6$

$-b - c = -5$

$b = 1 \text{ ise } c = 4$

O halde  $a - c = 4$  ise  $a - 4 = 4$  $a = 8$  bulunur.

Cevap: D

16.

|   |   |    |    |
|---|---|----|----|
| X | a | b  | c  |
| a |   | 4c |    |
| b |   |    | 9a |
| c |   |    |    |

$a.b = 4c$

$x \quad b.c = 9a$

$\cancel{a}.b^2.\cancel{c} = 4\cancel{c}.9\cancel{a}$

$b^2 = 36$

$b = 6$

Cevap: B

17. Tablodan  $x + y = 72$ 

$y + z = 4z \Rightarrow y = 3z$

$x + z = 2y \Rightarrow x + z = 6z$

$x = 5z \text{ olur.}$

$x + y = 72 \Rightarrow 5z + 3z = 72$

$8z = 72$

$z = 9 \text{ ve } x = 45, y = 27$

Cevap: D

TASARI EĞİTİM YAYINLARI

18.

|       |   |   |       |
|-------|---|---|-------|
| $a^b$ |   |   | $b^a$ |
|       | a | b |       |
| a + b |   |   | a.b   |

|   |   |   |   |
|---|---|---|---|
| x |   |   | y |
|   | 2 | 3 |   |
| w |   |   | z |

$a = 2 \quad b = 3$

$x = a^b = 2^3 = 8$

$y = b^a = 3^2 = 9$

$w = a + b = 2 + 3 = 5$

$z = a.b = 2.3 = 6$

$\frac{x+y}{w-z} = \frac{8+9}{5-6} = \frac{17}{-1} = -17$

Cevap: B

19.

|   |      |      |    |
|---|------|------|----|
| + | a    | b    | c  |
| a |      |      | 10 |
| b | 2c-3 |      |    |
| c |      | 3a-1 |    |

a, b, c &gt; 0

a.c + b = ?

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

$$a + c = 10 \dots\dots(i)$$

$$\begin{array}{r} -1/ \\ c + b = 3a - 1 \\ \hline \end{array}$$

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

$$-c - b = -3a + 1$$

$$a - c = 2c - 3a - 2$$

$$4a - 3c = -2 \dots\dots(ii)$$

$$(i) \text{ ve } (ii) \text{ den } \quad 3/ \quad a + c = 10$$

$$4a - 3c = -2$$

$$3a + 3c = 30$$

$$+ 4a - 3c = -2$$

$$7a = 28 \Rightarrow a = 4$$

$$4 + c = 10 \Rightarrow c = 6$$

$$b + 4 = 2.6 - 3$$

$$b = 12 - 3 - 4$$

$$b = 5$$

$$a.c + b = 4.6 + 5$$

$$= 24 + 5$$

$$= 29 \text{ bulunur.}$$

Cevap: A

20.

|   |   |   |   |    |  |
|---|---|---|---|----|--|
| 6 | 4 | 2 | 8 | 40 | $\Rightarrow (6 \times 4) + (2 \times 8) = 24 + 16 = 40$             |
| 1 | 5 | 7 | 4 | 33 | $\Rightarrow (1 \times 5) + (7 \times 4) = 5 + 28 = 33$              |
| 4 | 3 | 6 | 2 | A  | $\Rightarrow (4 \times 3) + (6 \times 2) = 12 + 12 = \boxed{24 = A}$ |
| 1 | 7 | 6 | 5 | 37 | $\Rightarrow (1 \times 7) + (6 \times 5) = 7 + 30 = 37$              |

Cevap: C