

## TEST - 1 ÇÖZÜMLER

1. I.  $2\star + \blacksquare = 2\blacktriangle$   
 II.  $\blacksquare + 3\blacktriangle = \blacktriangle + 3\star$   

$$\begin{array}{r} + \\ \hline 2\blacksquare + 3\blacktriangle + 2\star = 3\blacktriangle + 3\star \\ 2\blacksquare = 3\star - 2\star = \star \end{array}$$

Cevap: E

2. II.  $2\bullet = \blacktriangle + \star + \blacksquare$   
 I.  $2\blacktriangle + \bullet = \blacktriangle + \star + \blacksquare$   

$$\begin{array}{r} = \\ \hline 2\bullet - 2\blacktriangle - \bullet = 0 \\ \bullet = 2\blacktriangle \end{array}$$

Cevap: A

3. II.  $2\bullet + \blacktriangle = \blacksquare + 2\star$   
 I.  $2\blacksquare + \blacktriangle + \bullet = 2\star + \blacksquare$   

$$\begin{array}{r} = \\ \hline \bullet - 2\blacksquare = 0 \\ 2\blacksquare = \bullet \end{array}$$

Cevap: B

4. I.  $\bullet + \star = 2\blacksquare$   
 II.  $2\bullet + \blacksquare = 3\star$   

$$\begin{array}{r} + \\ \hline 3\bullet + 2\blacksquare + \star = 2\blacksquare + 6\star \\ 3\bullet = 5\star \end{array}$$

Cevap: D

5. I.  $\bullet + \blacktriangle = 3\bullet$   

$$\begin{array}{r} \boxed{\blacktriangle = 2\bullet} \end{array}$$
  
 II.  $2\star = 3\blacktriangle$   

$$\begin{array}{r} \downarrow \\ 2\star = 6\bullet \\ \boxed{\star = 3\bullet} \end{array}$$

III.  $\star + \bullet = 4\bullet = 2 \cdot (2\bullet) = 2\blacktriangle$   

$$\begin{array}{r} \downarrow \qquad \qquad \downarrow \\ 3\bullet \qquad \qquad \blacktriangle \end{array}$$

Cevap: B

6. I.  $4\blacktriangle = 3\bullet$   
 II.  $\blacksquare = \blacktriangle + \bullet$   

$$\begin{array}{r} + \\ \hline 4\blacktriangle + \blacksquare = 4\bullet + \blacktriangle \\ 3\blacktriangle + \blacksquare = 4\bullet \end{array}$$

Cevap: C

7. II.  $\blacksquare = 2\blacktriangle$   
 I.  $2\blacktriangle + 3\blacksquare = 2\star$   

$$\begin{array}{r} \downarrow \\ 2\blacktriangle \end{array}$$
  

$$\begin{array}{r} 2\blacktriangle + 6\blacktriangle = 2\star \\ 8\blacktriangle = 2\star \\ 4\blacktriangle = \star \end{array}$$

Cevap: E

## TEST - 1 ÇÖZÜMLER

8. I.  $2★ = ★ + 4●$

$★ = 4●$

$★ = 2.(2●)$

$$\begin{array}{c} \downarrow \\ ★ = 2.■ \end{array}$$

II.  $2● = ■$

Cevap: D

11. I.  $2■ = 5★$

II.  $3★ = 2▲$

$$\begin{array}{r} + \\ 2■ + 3★ = 5★ + 2▲ \end{array}$$

$2■ = 2★ + 2▲$

$■ = ★ + ▲$

Cevap: A

9. I.  $2● = 3★$

II.  $★ = 2■$

$$\begin{array}{r} + \\ 2● + ★ = 3★ + 2■ \end{array}$$

$2● + ★ = 3★ + 2■$

$2● = 2★ + 2■$

$● = ★ + ■$

Cevap: A

12. II.  $2● = 2★ + ■$

I.  $▲ = 3● + ■$

$▲ = 2● + ● + ■$

$$\begin{array}{c} \downarrow \\ 2★ + ■ \end{array}$$

$▲ = 2★ + 2■ + ●$

Cevap: E

10. I.  $2▲ = 3●$

$$\begin{array}{c} \downarrow \\ 2★ \end{array}$$

$2▲ = 6★$

$▲ = 3★$

II.  $● = 2★$

Cevap: D

## TEST - 2 ÇÖZÜMLER

1. I.  $\blacksquare = 3\blacktriangle$

$$\Rightarrow 2\blacksquare + \star = 6\blacktriangle + 4\blacktriangle = 10\blacktriangle = 2 \cdot (4\blacktriangle) + 2\blacktriangle$$

$$\begin{array}{cc} \downarrow & \downarrow \\ 3\blacktriangle & 4\blacktriangle \end{array}$$

II.  $\blacktriangle + \blacksquare = \star$

$$\begin{array}{c} \downarrow \\ \blacktriangle + 3\blacktriangle = \star \\ \boxed{4\blacktriangle = \star} \end{array}$$

$$\begin{array}{c} \downarrow \\ \star \\ = 2\star + 2\blacktriangle \end{array}$$

Cevap: D

2. I.  $C + E = 5M$   
 $E = 5M - C$

II.  $2E = 3C$  ise  
 $2(5M - C) = 3C$   
 $10M - 2C = 3C$   
 $10M = 5C$   
 $\boxed{2M = C}$

Cevap: C

3. II.  $\blacktriangle + 2\blacksquare = 3\star$

I.  $3\blacktriangle = 5\star$   
 $3\blacktriangle = 3\star + 2\star$   
$$\begin{array}{c} \downarrow \\ \underbrace{3\blacktriangle = \blacktriangle + 2\blacksquare + 2\star} \\ 2\blacktriangle = 2\blacksquare + 2\star \\ \boxed{\blacktriangle = \blacksquare + \star} \end{array}$$

Cevap: B

4. I.  $\star + \blacksquare = 3\blacktriangle$

$\star = 3\blacktriangle - \blacksquare$

II.  $\star + 2\blacktriangle = 2\blacksquare$

$$\begin{array}{c} \downarrow \\ 3\blacktriangle - \blacksquare + 2\blacktriangle = 2\blacksquare \\ 5\blacktriangle - \blacksquare = 2\blacksquare \\ \boxed{5\blacktriangle = 3\blacksquare} \end{array}$$

Cevap: C

5. II.  $2\bullet = \star + \blacktriangle$

I.  $3\bullet = \star + \blacksquare$

$2\bullet + \bullet = \star + \blacksquare$

$$\begin{array}{c} \downarrow \\ \underbrace{2\bullet + \bullet = \star + \blacksquare} \\ \star + \blacktriangle + \bullet = \star + \blacksquare \\ \blacktriangle + \bullet = \blacksquare \end{array}$$

III.  $\star + \bullet = \blacktriangle + \blacksquare$

$$\begin{array}{c} \downarrow \\ \star + \bullet = \blacktriangle + \blacktriangle + \bullet \\ \boxed{\star = 2\blacktriangle} \end{array}$$

Cevap: A

6. I.  $2\star + 2\blacktriangle + \bullet = 3\bullet$

$2\star + 2\blacktriangle = 3\bullet - \bullet$

$2\star + 2\blacktriangle = 2\bullet$

$\star + \blacktriangle = \bullet$

$\downarrow$

$2\blacktriangle + \blacktriangle = \bullet$

$\boxed{3\blacktriangle = \bullet}$

II.  $\star = 2\blacktriangle$

Cevap: C

## TEST - 2 ÇÖZÜMLER

7. I.  $\star + \bullet + 2\blacksquare = 2\blacktriangle$

II.  $\blacksquare + \star = \blacktriangle$

$$\begin{array}{r} \blacksquare + \star = \blacktriangle \\ - \blacksquare + \blacksquare = \blacksquare \\ \hline \bullet + \blacksquare = \blacktriangle \end{array}$$

$\Rightarrow$  III.  $2\bullet = 2\star$

$$\begin{array}{c} \bullet \\ \downarrow \\ \star \end{array}$$

II.  $\blacksquare + \star = \blacktriangle$

$$\begin{array}{c} \blacksquare + \star = \blacktriangle \\ \downarrow \\ \blacksquare + \star = \bullet + \blacksquare \end{array}$$

$\star = \bullet$

Cevap: E

10.  $4N = 3P$  ( $P = 4$ )

$4.N = 3.4$

$N = 3$

I.  $2K = P$

$2K = 4$

$K = 2$

$\Rightarrow$  III.  $2N = 2.3 = 6$

C)  $KP = 2 + 4 = 6$

Cevap: C

8. I.  $\blacksquare = 4\star$  ( $\star = 3$ )

$\downarrow$

$\blacksquare = 4.3$

$\blacksquare = 12$

II.  $2\blacksquare = 3\bullet + 3\star$

$\downarrow$

$2.12 = 3\bullet + 3.3$

$24 - 9 = 3\bullet$

$15 = 3\bullet$

$\bullet = 5$

$\Rightarrow$  III.  $\blacksquare + \star = 12 + 3 = 15$

$\bullet + \bullet + \bullet = 5 + 5 + 5 = 15$

Cevap: E

11. II.  $2K = 6P$  ( $P = 7$ )

$\downarrow$

$2.K = 6.7$

$K = 21$

I.  $2K + P = 7N$

$\downarrow$

$2.21 + 7 = 7.N$

$49 = 7.N$

$7 = N$

$\Rightarrow$  III.  $P = 7$

A)  $N = 7$

Cevap: A

9. II.  $4\blacktriangle = 2\star$  ( $\star = 4$ )

$\downarrow$

$4\blacktriangle = 2.4$

$\blacktriangle = 2$

I.  $3\blacktriangle = \star + \blacksquare$

$\downarrow$

$3.2 = 4 + \blacksquare$

$6 = 4 + \blacksquare$

$2 = \blacksquare$

$\Rightarrow$  III.  $\blacksquare = 2$

E)  $\blacktriangle = 2$

Cevap: E

12. I.  $3\bullet = 2\star$  ( $\star = 3$ )

$\downarrow$

$3\bullet = 2.3$

$\bullet = 2$

II.  $3\blacktriangle = \star$

$\downarrow$

$3\blacktriangle = 3$

$\blacktriangle = 1$

$\Rightarrow$  III.  $\star + \blacktriangle = 3 + 1 = 4$

B)  $\bullet + \bullet = 2 + 2 = 4$

Cevap: B

## TEST - 3 ÇÖZÜMLER

1. I.  $2■ = 3▲ (\triangle = 2)$

$$\downarrow$$

$$2■ = 3.2$$

$$\boxed{■ = 3}$$

II.  $2● = 2■$

$$\downarrow$$

$$2● = 2.3$$

$$\boxed{● = 3}$$

III.  $★ = ▲ + ●$

$$\downarrow \quad \downarrow$$

$$★ = 2 + 3$$

$$\boxed{★ = 5}$$

$\Rightarrow$  IV.  $★ + ▲ = 5 + 2 = 7$

D)  $■▲▲ = 3 + 2.2 = 7$

Cevap: D

2. I.  $3▲ = 2● (\bullet = 3)$

$$\downarrow$$

$$3▲ = 2.3$$

$$\boxed{▲ = 2}$$

II.  $2■ = 3▲ + 4●$

$$\downarrow$$

$$2■ = 3.2 + 4.3$$

$$2■ = 18$$

$$\boxed{■ = 9}$$

$\Rightarrow$  III.  $■ = 9$

C)  $●●● = 3.3 = 9$

Cevap: C

3. I.  $2▲ = 4★ (\star = 3)$

$$\downarrow$$

$$2▲ = 4.3$$

$$\boxed{▲ = 6}$$

III.  $3■ = ▲ + 2★$

$$\downarrow \quad \downarrow$$

$$3■ = 6 + 2.3$$

$$\boxed{■ = 4}$$

II.  $● = 3■ + ★$

$$\downarrow \quad \downarrow$$

$$● = 3.4 + 3$$

$$\boxed{● = 15}$$

$\Rightarrow$  IV.  $● + ▲ = (15 + 6) = 21$

E)  $■■▲★▲ = 3.4 + 3.3 = 21$

Cevap: E

4. I.  $2★ = 2● + 2■ (\bullet = 3, \blacksquare = 2)$

$$\downarrow \quad \downarrow$$

$$2★ = 2.3 + 2.2$$

$$2★ = 10$$

$$\boxed{★ = 5}$$

II.  $▲ + ★ = 2▲ + 2■$

$$\downarrow \quad \downarrow$$

$$▲ + 5 = 2▲ + 2.2$$

$$▲ + 5 = 2▲ + 4$$

$$\boxed{▲ = 1}$$

$\Rightarrow$  III.  $2■ + ▲ = 2.2 + 1 = 5$

D)  $■● = 2 + 3 = 5$

Cevap: D

5. I.  $5▲ = ● + ★ (\bullet = 4, \star = 6)$

$$\downarrow \quad \downarrow$$

$$5▲ = 4 + 6$$

$$5▲ = 10$$

$$\boxed{▲ = 2}$$

II.  $● + 2■ = 3▲$

$$\downarrow \quad \downarrow$$

$$4 + 2■ = 3.2$$

$$2■ = 2$$

$$\boxed{■ = 1}$$

III.  $2● = ★ + ▲$

$$\downarrow \quad \downarrow$$

$$2● = 6 + 2$$

$$2● = 8$$

$$\boxed{● = 4}$$

$\Rightarrow$  IV.  $★ = 6$

B)  $●■■ = 4 + 2.1 = 6$

Cevap: B

## TEST - 3 ÇÖZÜMLER

6. II.  $2\blacktriangle + \blacksquare = 2\bullet$   
 $2\blacktriangle = 2\bullet - \blacksquare$

I.  $2\blacksquare + \bullet = 3\blacktriangle$   
 $2\blacksquare + \bullet = 2\blacktriangle + \blacktriangle$   
 $\downarrow$   
 $2\blacksquare + \bullet = 2\bullet - \blacksquare + \blacktriangle$   
 $2\blacksquare + \bullet = 2\bullet - \blacksquare + \blacktriangle$   
 $3\blacksquare = \bullet + \blacktriangle$

Cevap: A

7. III.  $2\bullet = 2\blacktriangle + \star$

I.  $3\blacksquare = \bullet + \blacktriangle$   
 II.  $2\star = \blacksquare + \bullet$   
 $+$   
 $3\blacksquare + 2\star = 2\bullet + \blacksquare + \blacktriangle$   
 $\downarrow$   
 $3\blacksquare + 2\star = 2\blacktriangle + \star + \blacksquare + \blacktriangle$   
 $3\blacksquare + 2\star - \star - \blacksquare = 3\blacktriangle$   
 $2\blacksquare + \star = 3\blacktriangle$

Cevap: A

8. II.  $\blacktriangle + \blacksquare = \star$   
 $\downarrow \quad \downarrow \quad \downarrow$   
 $3 + 1 = 4$

I.  $2\blacksquare + \bullet = 2\star + \blacktriangle$   
 $\downarrow \quad \quad \downarrow \quad \downarrow$   
 $2.1 + \bullet = 2.4 + 3$   
 $\bullet = 9$

$\Rightarrow$  III.  $\bullet + \blacksquare = 9 + 1 = 10$

E)  $\star\blacktriangle\blacktriangle = 4 + 2.3 = 10$

Cevap: E

9. I.  $3\star = \bullet + \blacksquare$   
 II.  $\blacksquare + \blacktriangle = \bullet$   
 $+$   
 $3\star + \blacksquare + \blacktriangle = 2\bullet + \blacksquare$   
 $3\star + \blacktriangle = 2\bullet$

III.  $2\bullet = 3\blacksquare$   
 $\downarrow$   
 $3\star + \blacktriangle = 3\blacksquare$

$\Rightarrow$  IV.  $3\blacksquare = 3\star + \blacktriangle$

Cevap: A

10. I.  $2\blacksquare = 3\star + \blacktriangle$

II.  $3\bullet = 2\blacksquare + 2\blacktriangle$   
 $\downarrow$   
 $3\bullet = 3\star + \blacktriangle + 2\blacktriangle$   
 $3\bullet = 3\star + 3\blacktriangle$   
 $\bullet = \star + \blacktriangle$

Cevap: C

11. III.  $2\blacktriangle = \bullet (\bullet = 4)$   
 $2\blacktriangle = 4$   
 $\blacktriangle = 2$

II.  $\star = 2\bullet$   
 $\downarrow$   
 $\star = 2.4$   
 $\star = 8$

I.  $\blacksquare = 2\star$   
 $\downarrow$   
 $\blacksquare = 2.8$   
 $\blacksquare = 16$

$\Rightarrow$  IV.  $2\blacktriangle + \blacksquare = 2.2 + 16 = 20$

E)  $\bullet\bullet\bullet\bullet\bullet\bullet = 6\bullet = 6.4 = 24$

Cevap: E

12. II.  $2\blacksquare = \bullet (\bullet = 4)$   
 $\downarrow$   
 $2\blacksquare = 4$   
 $\blacksquare = 2$

I.  $\star = \bullet + \blacksquare$   
 $\downarrow \quad \downarrow$   
 $\star = 4 + 2$   
 $\star = 6$

$\Rightarrow$  III.  $\star + \bullet = 6 + 4 = 10$

D)  $\blacksquare\blacksquare\bullet = 2.2 + 4 = 8$

Cevap: D