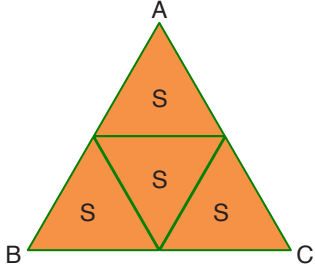


1.



$$x = \frac{\text{Boyalı alanlar}}{A(ABC)} = \frac{3S}{4S} = \frac{3}{4}$$

I.  $0 < \frac{3}{4} < 1$  doğruII.  $\frac{1}{\left(\frac{3}{4}\right)^3} < \frac{1}{\left(\frac{3}{4}\right)^4} \Rightarrow \left(\frac{4}{3}\right)^3 < \left(\frac{4}{3}\right)^4$  doğru.III.  $\left(\frac{3}{4}\right)^2 < \frac{3}{4}$  doğru

O halde I, II ve III doğru.

Cevap: E

2.

	I	II
Badem	61	59
Ceviziçi	50	55
Fıstık	25	24

$$\begin{aligned} \text{en az} &\Rightarrow 59 + 50 + 24 \\ &= 133 \text{ TL harcar} \end{aligned}$$

$$\begin{aligned} \text{en çok} &\Rightarrow 61 + 55 + 25 \\ &= 141 \text{ harcar.} \end{aligned}$$

$$133 \leq A \leq 141$$

Cevap: B

3.

● → a gr    ▲ → b gr    ■ → c gr olsun.

$$\bullet \bullet \blacktriangle \rightarrow 2a + b = x$$

$$\blacksquare \blacksquare \blacktriangle \rightarrow 2c + b = y$$

$$\blacktriangle \blacktriangle \bullet \rightarrow 2b + a = z$$

$$\blacktriangle \bullet \blacksquare \rightarrow a + b + c = m$$

$$\bullet \quad x < y < z \Rightarrow 2a + b < 2c + b < 2b + a$$

$$\bullet \quad 2a + b < 2c + b$$

$$2a < 2c$$

$$a < c$$

$$\bullet \quad 2a + b < 2b + a$$

$$a < b$$

$$\text{O halde } m < y \Rightarrow a + b + c < 2c + b$$

$$a < c \text{ doğrudur.}$$

Cevap: C

4. Canan

$$zxy < yzx \Rightarrow z < y$$

$$yxz < yzx \Rightarrow x < z$$

$$xyz < xzy \Rightarrow y < z$$

çelişiyor.

O halde  $x < z$  doğru

Çınar

$$zxy < xyz \Rightarrow z < x \quad (x < z \text{ olduğundan yanlış})$$

$$yxz < zyx \Rightarrow y < z \quad \text{doğru olmalı}$$

$$xzy < yxz \Rightarrow x < y \quad \text{doğru olmalı}$$

O halde  $x < y < z$  sıralaması oluşur.

Cevap: A

5. •  $\frac{|a|}{b} < 0 \Rightarrow |a| > 0$  olduğundan  $b < 0$  olmalı
- $a \cdot b < 0 \Rightarrow b < 0$  olduğundan  $a > b$  olmalı  
 $\downarrow \downarrow$   
 $+ -$

I.  $a > 0$  ve  $b < 0$  ise  $a + b > 0$  veya  $a + b < 0$  olabilir.

II.  $a > 0$  ve  $b < 0$  ise  $a - b > 0$  olur.

III.  $b < 0$  ise  $-b > 0$  ve  $1 - b > 1$

$a > 0$  ve  $1 - b > 1$  ise  $a \cdot (1 - b) > 0$  olur.

Yalnız II doğru

Cevap: B

6. Sadık  $(x + y + 2z)$  TL öder.  
 Esin  $(x + 2y + z)$  TL öder.  
 Hilal  $(2x + y + z)$  TL öder.

O halde  $x + y + 2z < x + 2y + z < 2x + y + z$  olur.

$$\bullet x + y + 2z < x + 2y + z \Rightarrow z < y$$

$$\bullet x + 2y + z < 2x + y + z \Rightarrow y < x$$

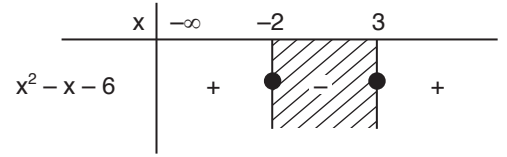
O halde  $z < y < x$  olur.

Cevap: E

7. •  $x - 3 < 0 \Rightarrow x < 3$
- $x + 4 \geq 0 \Rightarrow x \geq -4$
- $\Rightarrow -4 \leq x < 3$
- ÇK:  $[-4, 3)$

Cevap: C

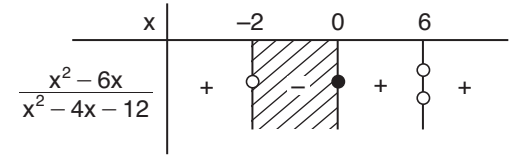
8. •  $x^2 - x - 6 = 0$   
 $\quad \quad \quad \wedge$   
 $\quad \quad \quad -3 \quad 2$   
 $(x - 3)(x + 2) = 0$   
 $x_1 = 3$  ve  $x_2 = -2$



ÇK:  $[-2, 3]$

Cevap: A

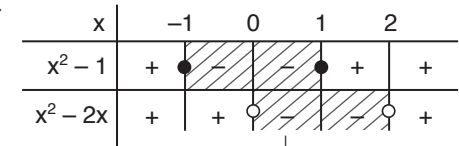
9. •  $x^2 - 6x = 0 \Rightarrow x(x - 6) = 0$   
 $x = 0$  ve  $x = 6$
- $x^2 - 4x - 12 = 0 \Rightarrow (x - 6)(x + 2) = 0$   
 $\quad \quad \quad \wedge$   
 $\quad \quad \quad -6 \quad 2$   
 $x = 6$  ve  $x = -2$



$\Rightarrow$  ÇK:  $(-2, 0]$

Cevap: B

10. •  $x^2 - 1 = 0 \Rightarrow x^2 = 1 \Rightarrow x = \pm 1$
- $x^2 - 2x = 0 \Rightarrow x(x - 2) = 0 \Rightarrow x = 0$  ve  $x = 2$
- $\Rightarrow$



ÇK:  $(0, 1]$

Aralıkta sadece 1 tam sayı vardır.

Cevap: A