

1. $s(\widehat{ABD}) = s(\widehat{BCF})$ 'dir.

(İç ters açılar)

$$5x = 6x - 12 \Rightarrow x = 12^0$$

$$y - 10 = 6x - 12 \text{ (Ters açılar)}$$

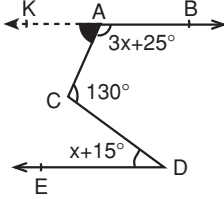
$$\Rightarrow y - 10 = 6 \cdot 12 - 12$$

$$\Rightarrow y - 10 = 60$$

$$\Rightarrow y = 70^0$$

Cevap: C

2.



$$s(\widehat{CAK}) = 180 - (3x + 25^0)$$

[AB// [DE olduğundan;

$$180 - (3x + 25^0) + x + 15^0 = 130^0$$

$$\Rightarrow 155 - 3x + x + 15^0 = 130^0$$

$$\Rightarrow 170^0 - 2x = 130^0 \quad \boxed{x = 20^0}$$

$$s(\widehat{CDE}) = x + 15^0 = 20 + 15 = 35^0$$

Cevap: D

3. $s(\widehat{ABE}) + s(\widehat{DEF}) = 180^0$ dir.

[BA// [CD $\Rightarrow s(\widehat{ABC}) = s(\widehat{DCB})$ (iç ters açılar)

$$\Rightarrow s(\widehat{ABE}) = 35^0 \text{ bulunur.}$$

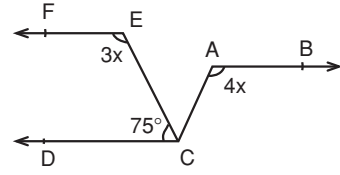
$$s(\widehat{ABE}) + s(\widehat{BEF}) = 180^0 \text{ dir.}$$

$$35^0 + s(\widehat{BEF}) = 180^0$$

$$\Rightarrow s(\widehat{BEF}) = 145^0$$

Cevap: D

4.



$$3x + 75^0 = 180^0 \Rightarrow x = 35^0$$

$s(\widehat{BAC}) = s(\widehat{ACD})$ (iç ters açılar)

$$s(\widehat{BAC}) = 4x = 4 \cdot 35^0 = 140^0 = s(\widehat{ACD})$$

$$s(\widehat{ACD}) = s(\widehat{ACE}) + s(\widehat{ECD})$$

$$140 = s(\widehat{ACE}) + 75^0 \Rightarrow s(\widehat{ACE}) = 65^0$$

Cevap: A

5. Aynı yöne ve zıt yöne bakan açılar toplamı eşittir.

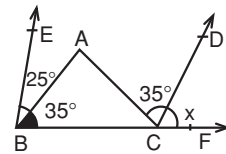
$$4x + 3x = 154^0$$

$$7x = 154^0$$

$$x = 22^0$$

Cevap: C

6.



$$s(\widehat{ABC}) = s(\widehat{ACD}) = 35^0 \text{ olur.}$$

$$s(\widehat{EBC}) = s(\widehat{DCF}) = x \text{ (Yöndeş açılar.)}$$

$$\Rightarrow 25 + 35^0 = x \Rightarrow x = 60^0$$

Cevap: C

$$7. \frac{1. \text{ açı}}{x} \quad \frac{2. \text{ açı}}{4x - 20}$$

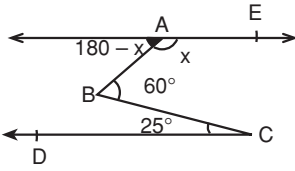
$$x + (4x - 20) = 180^0$$

$$\Rightarrow x = 40^0 \text{ bulunur.}$$

$$\frac{1. \text{ açı}}{40} \quad \frac{2. \text{ açı}}{140^0}$$

Cevap: C

8.



$$180 - x + 25 = 60^0 \Rightarrow x = 145^0$$

Cevap: A

9. $s(\widehat{BAE}) = s(\widehat{DCE})$ (Yöndeş açılar.)

$$s(\widehat{DCE}) = s(\widehat{DFK}) \text{ (Yöndeş açılar.)}$$

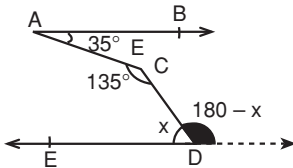
$$\Rightarrow s(\widehat{BAE}) = 5x - 20 = 3x + 10$$

$$\Rightarrow x = 15^0 \text{ bulunur.}$$

$$s(\widehat{DCE}) = s(\widehat{BAE}) = 5 \cdot 15^0 - 20 = 55^0$$

Cevap: D

10.



$$180 - x + 35^0 = 135^0$$

$$\Rightarrow x = 80^0$$

Cevap: C

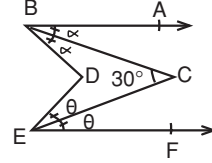
11. $[BA // DE]$ olduğundan;

$$125^0 + (2x + 10) + 135^0 = 360^0$$

$$\Rightarrow 2x = 90^0 \Rightarrow x = 45^0$$

Cevap: C

12.



$$\alpha + \theta = 30^0 \text{ olur.}$$

$$s(\widehat{BDE}) = s(\widehat{ABD}) + s(\widehat{DEF})$$

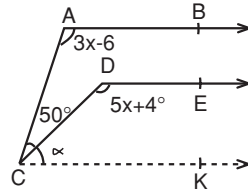
$$= 2\alpha + 2\theta$$

$$= 2(\alpha + \theta)$$

$$= 2 \cdot 30^0 = 60^0$$

Cevap: B

13.

 $[CK // AB // DE]$ ($[CK]$ çizilir.)

$$s(\widehat{DCK}) = \alpha \text{ olsun}$$

$$3x - 6 + 50 + \alpha = 180^0 \dots\dots(1)$$

$$5x + 4^0 + \alpha = 180^0 \dots\dots(2) \text{ 6 olur.}$$

$$(1) \dots\dots - / 3x + \alpha = 136^0 / -$$

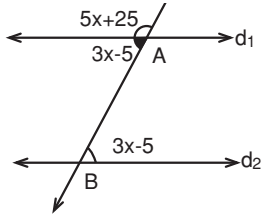
$$(2) \dots\dots + 5x + \alpha = 176^0$$

$$2x = 40^0$$

$$x = 20^0$$

Cevap: D

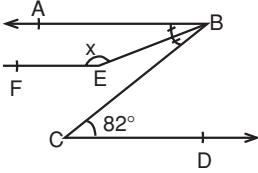
14.



$$\begin{aligned} 5x + 25 + 3x - 5 &= 180^0 \\ 8x &= 160^0 \\ x &= 20^0 \end{aligned}$$

Cevap: A

15.



$$\begin{aligned} s(\widehat{BCD}) &= s(\widehat{ABC}) = 82^0 \\ \Rightarrow s(\widehat{ABE}) &= \frac{82}{2} = 41^0 \text{ olur.} \\ s(\widehat{ABE}) + s(\widehat{BEF}) &= 110^0 \\ 41^0 + s(\widehat{BEF}) &= 180^0 \\ s(\widehat{BEF}) &= 139^0 \end{aligned}$$

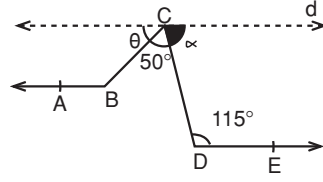
Cevap: B

16. $s(\widehat{BCD}) = x$ olsun

$$\begin{aligned} 128^0 + 105^0 + x &= 360^0 \text{ ([AE // CD]} \\ x &= 139^0 \end{aligned}$$

Cevap: D

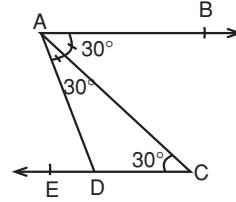
17.



$$\begin{aligned} 115 + x &= 180^0 \Rightarrow x = 65^0 \text{ 'dir.} \\ x + 50^0 + \theta &= 180^0 \Rightarrow 65^0 + 50^0 + \theta = 180^0 \\ \Rightarrow \theta &= 65^0 \\ \Rightarrow \theta + s(\widehat{CBA}) &= 180^0 \\ 65 + s(\widehat{CBA}) &= 180^0 \\ \Rightarrow s(\widehat{CBA}) &= 115^0 \end{aligned}$$

Cevap: A

18.



$$\begin{aligned} s(\widehat{ACD}) &= s(\widehat{BAC}) = 30^0 \text{ (iç açılar)} \\ s(\widehat{ADE}) &= s(\widehat{BAD}) = 60^0 \text{ (iç ters açılar)} \end{aligned}$$

Cevap: D

$$\begin{aligned} 19. \quad s(\widehat{DAB}) + s(\widehat{ABC}) + s(\widehat{BCE}) + 360^0 \\ 110^0 + s(\widehat{ABC}) + 130^0 &= 360^0 \\ \Rightarrow s(\widehat{ABC}) &= 120^0 \text{ dir.} \\ x + s(\widehat{ABC}) &= 180^0 \\ x + 120^0 &= 180^0 \Rightarrow x = 60^0 \end{aligned}$$

Cevap: C

$$20. s(\widehat{BEF}) + s(\widehat{EFD}) = 180^{\circ}$$

$$2 \cdot a + 2 \cdot b = 180^{\circ}$$

$$a + b = 90^{\circ}$$

AGF üçgeninin iç açıları toplamı 180° 'dir.

Buna göre;

$$\underbrace{a + b}_{90} + s(\widehat{EGF}) = 180^{\circ}$$

$$90 + s(\widehat{EGF}) = 180^{\circ}$$

$$\Rightarrow s(\widehat{EGF}) = 90^{\circ} \text{ dir.}$$

Cevap: A