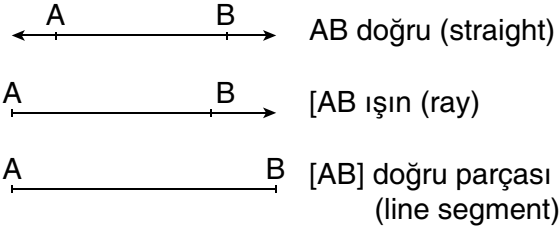
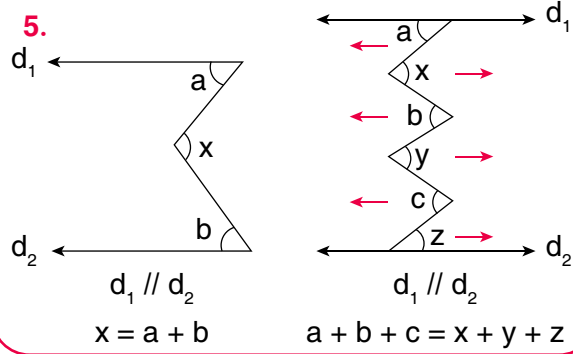




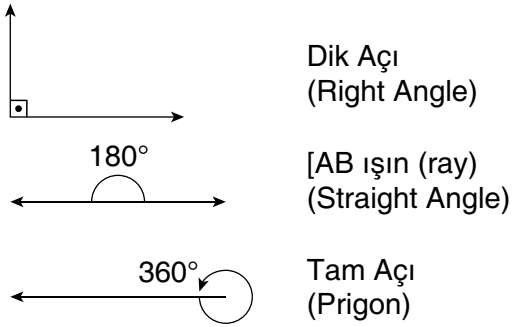
1.



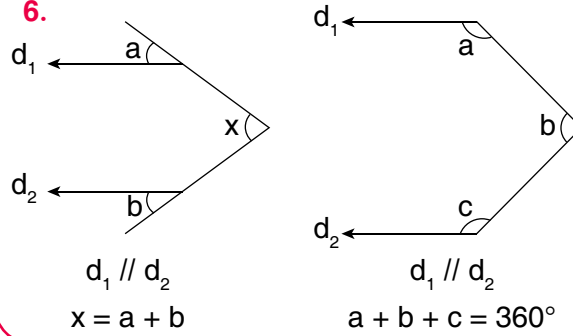
5.



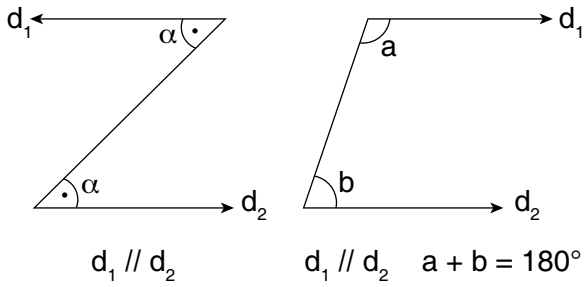
2.



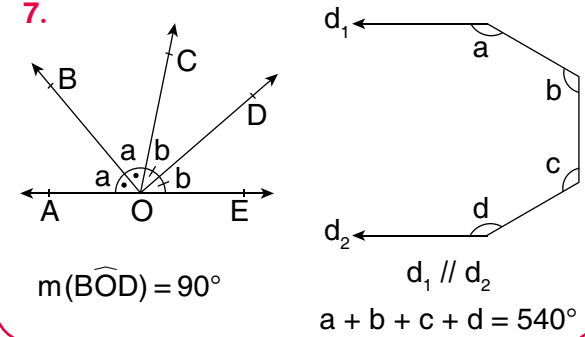
6.



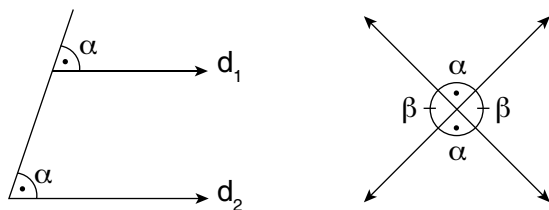
3.



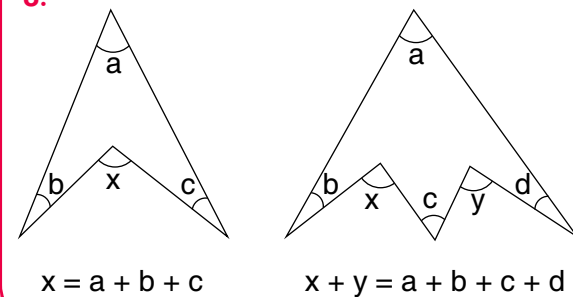
7.



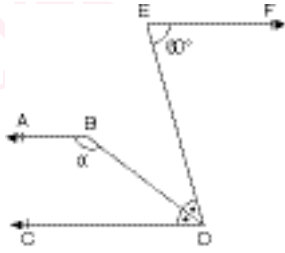
4.



8.



1.

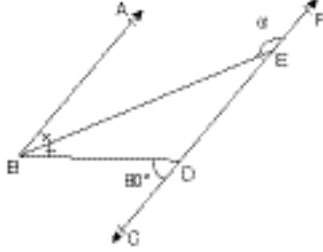


$[EF \parallel BA \parallel DC]$   
 $m(\widehat{EDB}) = m(\widehat{BDC})$   
 $m(\widehat{DEF}) = 60^\circ$

$$\Rightarrow m(\widehat{ABD}) = \alpha = ?$$

- A)  $130^\circ$  B)  $135^\circ$  C)  $145^\circ$  D)  $150^\circ$  E)  $155^\circ$

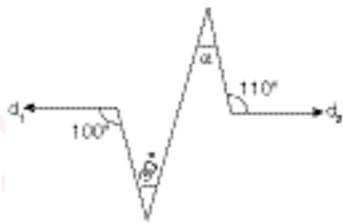
2.



$[BA \parallel CF]$   
 $m(\widehat{BDC}) = 80^\circ$   
 $m(\widehat{ABE}) = m(\widehat{EBD})$   
 $\Rightarrow m(\widehat{BEF}) = \alpha = ?$

- A)  $145^\circ$  B)  $140^\circ$  C)  $130^\circ$  D)  $125^\circ$  E)  $115^\circ$

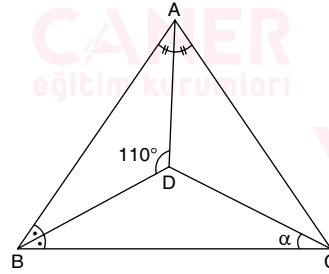
3.



$d_1 \parallel d_2$   
 $\Rightarrow \alpha = ?$

- A)  $30^\circ$  B)  $40^\circ$  C)  $50^\circ$  D)  $60^\circ$  E)  $70^\circ$

4.

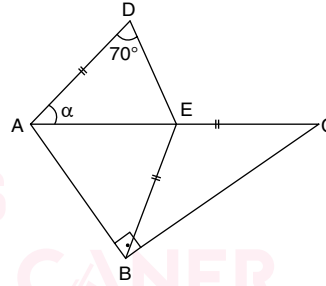


$m(\widehat{BAD}) = m(\widehat{DAC})$   
 $m(\widehat{ABD}) = m(\widehat{DBC})$   
 $m(\widehat{ADB}) = 110^\circ$

$$\Rightarrow m(\widehat{DCB}) = \alpha = ?$$

- A)  $10^\circ$  B)  $20^\circ$  C)  $30^\circ$  D)  $40^\circ$  E)  $60^\circ$

5.

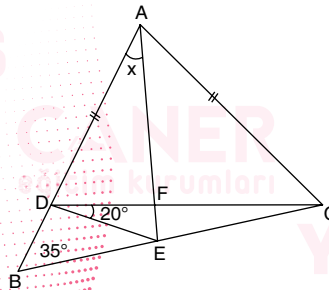


$[AB] \perp [BC]$   
 $|AD| = |BE| = |EC|$   
 $m(\widehat{ADE}) = 70^\circ$

$$\Rightarrow m(\widehat{DAE}) = \alpha = ?$$

- A)  $5^\circ$  B)  $15^\circ$  C)  $20^\circ$  D)  $30^\circ$  E)  $40^\circ$

6.

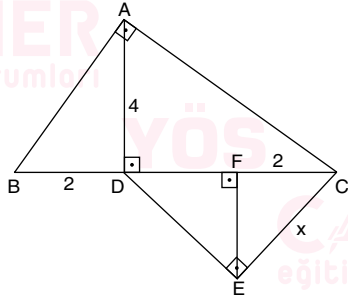


$|AD| = |AC|$   
 $|DF| = |FC|$   
 $m(\widehat{ADC}) = 20^\circ$   
 $m(\widehat{ABC}) = 35^\circ$

$$\Rightarrow m(\widehat{BAE}) = x = ?$$

- A)  $70^\circ$  B)  $65^\circ$  C)  $55^\circ$  D)  $35^\circ$  E)  $20^\circ$

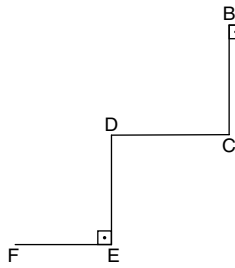
7.



[AB]  $\perp$  [AC]  
 [AD]  $\perp$  [BC]  
 [DE]  $\perp$  [EC]  
 [EF]  $\perp$  [BC]  
 |AD| = 4 br  
 |BD| = |FC| = 2 br  
 $\Rightarrow$  |EC| = x = ?

- A) 3    B) 4    C) 5    D) 6    E) 8

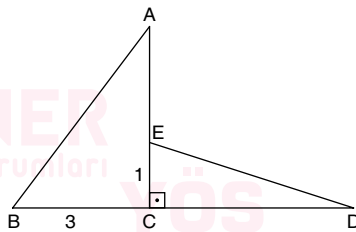
8.



[AB] // [DC] // [EF]  
 [AB]  $\perp$  [BC]  
 [DE]  $\perp$  [EF]  
 |AB| = |DC| = |EF| = 3 br  
 |BC| = |DE| = 6 br  
 $\Rightarrow$  |AF| = ?

- A) 13    B) 14    C) 15    D) 16    E) 17

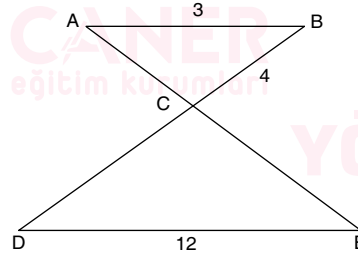
9.



[AC]  $\perp$  [BD]  
 |AB| = |ED|  
 |BC| = |AE| = 3 br  
 |EC| = 1 br  
 $\Rightarrow$  |CD| = ?

- A) 4    B)  $3\sqrt{2}$     C)  $2\sqrt{5}$     D)  $2\sqrt{6}$     E) 5

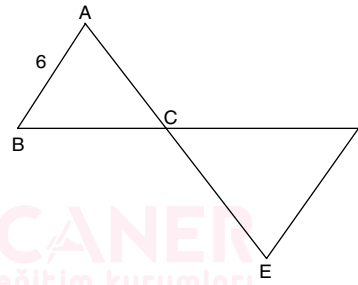
10.



[AB] // [DE]  
 |AB| = 3 br  
 |BC| = 4 br  
 |DE| = 12 br  
 $\Rightarrow$  |CD| = ?

- A) 8    B) 9    C) 12    D) 16    E) 18

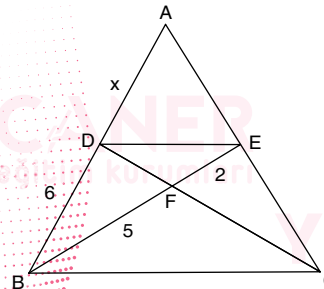
11.



[AB] // [DE]  
 3|BC| = 2|CD|  
 |AB| = 6 br  
 $\Rightarrow$  |DE| = ?

- A) 4    B) 8    C) 9    D) 12    E) 16

12.

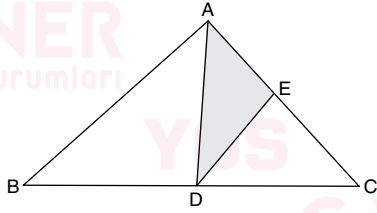


[DE] // [BC]  
 |EF| = 2 br  
 |BF| = 5 br  
 |BD| = 6 br

$\Rightarrow$  |AD| = x = ?

- A) 4    B) 6    C) 8    D) 10    E) 12

13.

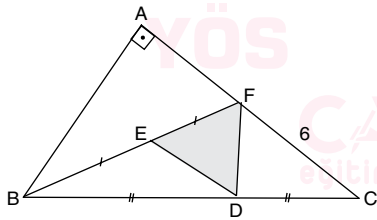


- A) 5    B) 6    C) 10    D) 12    E) 18

$|BD| = |DC|$   
 $3|AE| = 2|EC|$   
 $A(ABD) = 30 \text{ br}^2$

$\Rightarrow A(ADE) = ?$

14.

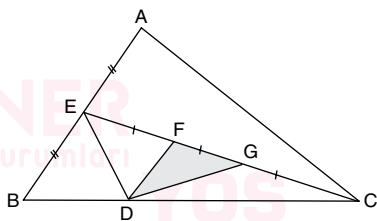


- A) 5    B)  $\frac{15}{2}$     C) 10    D)  $\frac{25}{2}$     E) 15

$[AB] \perp [AC]$   
 $|BD| = |DC|$   
 $|BE| = |EF|$   
 $|AB| = 10 \text{ br}$   
 $|FC| = 6 \text{ br}$

$\Rightarrow A(EDF) = ?$

15.

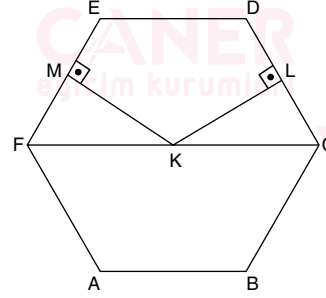


- A) 2    B) 3    C) 4    D) 5    E) 6

$|AE| = |EB|$   
 $|EF| = |FG| = |GC|$   
 $3|BD| = 2|DC|$   
 $A(ABC) = 50 \text{ br}^2$

$\Rightarrow A(FDG) = ?$

16.



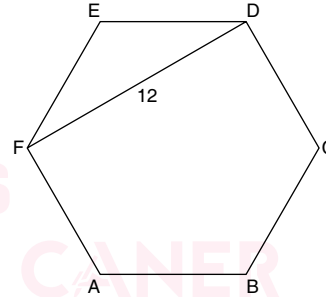
- A)  $\frac{25\sqrt{3}}{4}$     B)  $16\sqrt{3}$     C)  $\frac{9\sqrt{3}}{4}$   
 D)  $\frac{5\sqrt{3}}{4}$     E)  $\frac{75\sqrt{3}}{2}$

ABCDEF düzgün altıgen, (regular hexagon)

$[KL] \perp [DC]$   
 $[KM] \perp [EF]$   
 $|KL| = \sqrt{3} \text{ br}$   
 $|KM| = 4\sqrt{3} \text{ br}$

$\Rightarrow A(ABCDEF) = ?$

17.



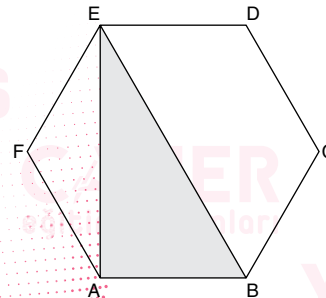
- A)  $18\sqrt{3}$     B)  $24\sqrt{3}$     C)  $36\sqrt{3}$     D)  $48\sqrt{3}$     E)  $72\sqrt{3}$

ABCDEF düzgün altıgen (regular hexagon)

$|FD| = 12 \text{ br}$

$\Rightarrow A(ABCDEF) = ?$

18.



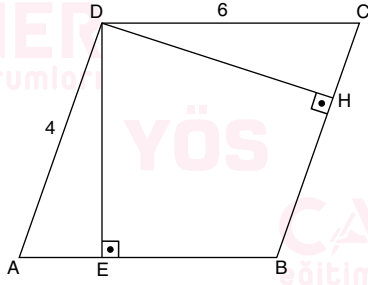
- A) 12    B) 18    C) 24    D) 36    E) 48

ABCDEF düzgün altıgen, (regular hexagon)

$A(EAB) = 18\sqrt{3}$

$\Rightarrow \text{Ç}(ABCDEF) = ?$

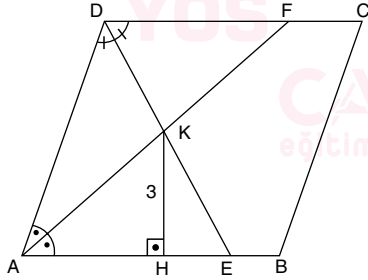
19.



ABCD paralelkenar  
(*parallelogram*)  
 $[DE] \perp [AB]$   
 $[DH] \perp [BC]$   
 $m(\widehat{EDH}) = 30^\circ$   
 $|AD| = 4$  br  
 $|DC| = 6$  br  
 $\Rightarrow A(ABCD) = ?$

- A) 12    B) 14    C) 16    D) 18    E) 24

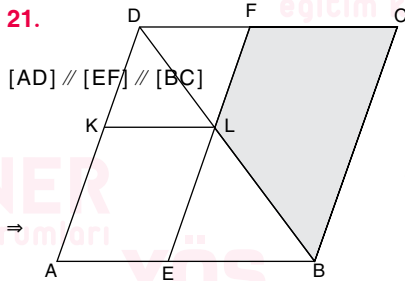
20.



ABCD paralelkenar  
(*parallelogram*)  
 $m(\widehat{DAF}) = m(\widehat{FAB})$   
 $m(\widehat{ADE}) = m(\widehat{EDC})$   
 $[KH] \perp [AB]$   
 $|KH| = 3$  br  
 $|DC| = 10$  br  
 $\Rightarrow A(ABCD) = ?$

- A) 30    B) 40    C) 45    D) 50    E) 60

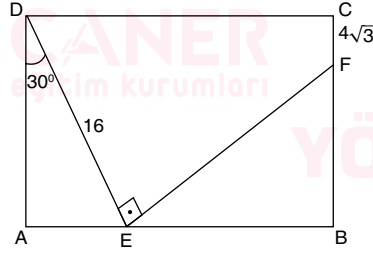
21.



$[AB] \parallel [KL] \parallel [DC]$   
 $A(DKL) = 9$  br<sup>2</sup>  
 $A(AELK) = 12$  br<sup>2</sup>  
 $A(LBCF) = ?$

- A) 15    B) 16    C) 18    D) 24    E) 32

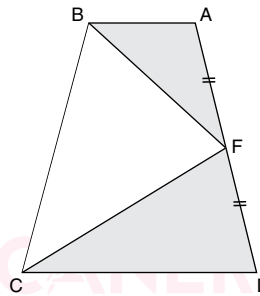
22.



ABCD dikdörtgen  
(*rectangle*)  
 $[DE] \perp [EF]$   
 $|DE| = 16$  br  
 $|CF| = 4\sqrt{3}$  br  
 $m(\widehat{ADE}) = 30^\circ$   
 $\Rightarrow |DC| = ?$

- A) 8    B) 14    C) 16    D) 20    E) 24

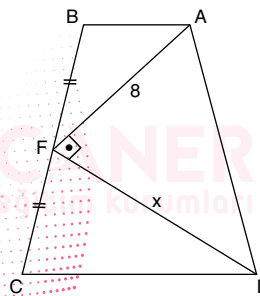
23.



ABCD yamuk (*trapezoid*)  
 $[AB] \parallel [CD]$   
 $|AF| = |FD|$   
 $A(BFC) = 45$  br<sup>2</sup>  
 $\Rightarrow A(ABF) + A(FCD) = ?$

- A) 45    B) 60    C) 70    D) 80    E) 90

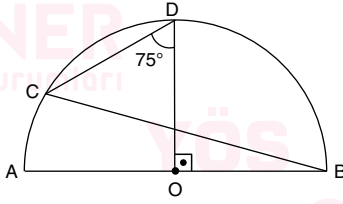
24.



ABCD yamuk (*trapezoid*)  
 $[AB] \parallel [CD]$   
 $|AF| = 8$  br  
 $|BF| = |FC|$   
 $A(ABCD) = 32$  br<sup>2</sup>  
 $\Rightarrow |FD| = x = ?$

- A) 1    B) 2    C) 3    D) 4    E) 5

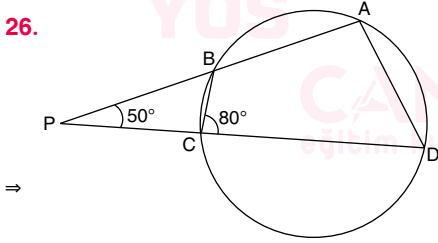
25.



O, merkez (center)  
 $[DO] \perp [AB]$   
 $m(\widehat{CDO}) = 75^\circ$   
 $\Rightarrow m(\widehat{ABC}) = ?$

- A)  $15^\circ$     B)  $20^\circ$     C)  $25^\circ$     D)  $30^\circ$     E)  $35^\circ$

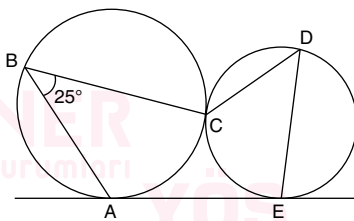
26.



$m(\widehat{APD}) = 50^\circ$   
 $m(\widehat{BCD}) = 80^\circ$   
 $\Rightarrow m(\widehat{ADP}) = ?$

- A)  $25^\circ$     B)  $30^\circ$     C)  $35^\circ$     D)  $40^\circ$     E)  $45^\circ$

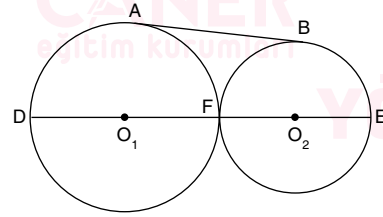
27.



$m(\widehat{ABC}) = 25^\circ$   
 $\Rightarrow m(\widehat{CDE}) = ?$

- A)  $50^\circ$     B)  $55^\circ$     C)  $60^\circ$     D)  $65^\circ$     E)  $70^\circ$

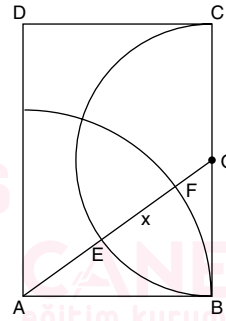
28.



$O_1$  ve  $O_2$ , merkez (center)  
 $|O_1F| = |O_2E| + 3$   
 $|AB| = 6\sqrt{2}$  br  
 $\Rightarrow |DE| = ?$

- A) 12    B) 16    C) 18    D) 24    E) 27

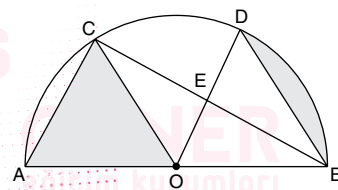
29.



ABCD dikdörtgen (rectangle)  
O, A merkez (center)  
 $|AD| = 16$  br  
 $|AB| = 6$  br  
 $\Rightarrow |EF| = x = ?$

- A) 4    B) 3    C)  $\frac{5}{2}$     D) 2    E)  $\frac{3}{2}$

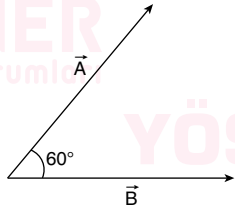
30.



O merkez (center)  
 $|AC| = |OB| = 4$  br  
 $[OC] \parallel [DB]$   
 $\Rightarrow$  Taralı Alan = ?  
(Shaded Area)

- A)  $\frac{4\pi}{3}$     B)  $\frac{8\pi}{3} - 4$     C)  $\frac{16\pi}{3}$   
D)  $\frac{16\pi}{3} - 2$     E)  $\frac{8\pi}{3}$

31.



$$\|\vec{A}\| = 7 \text{ br}$$

$$\|\vec{B}\| = 8 \text{ br}$$

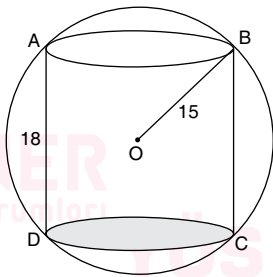
$$\Rightarrow \|\vec{A} - \vec{B}\| = ?$$

- A) 8    B)  $\sqrt{57}$     C)  $2\sqrt{13}$     D)  $4\sqrt{3}$     E) 6

32.  $\vec{A}(1, -2)$  vektörünün  $\vec{B}(3, -4)$  vektörü üzerindeki dik izdüşüm vektörünün uzunluğu nedir?

- A)  $\frac{11}{5}$     B) 6    C) 9    D) 15    E)  $\frac{33}{2}$

33.



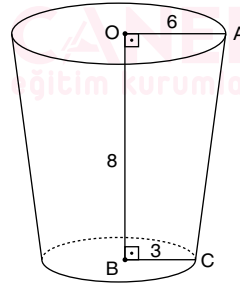
$$|OB| = 15 \text{ br}$$

$$|AD| = 18 \text{ br}$$

$\Rightarrow$  **dik dairesel silindirin taban alanı kaç  $\text{br}^2$  dir?**  
(bottom area of right cylinder?)

- A)  $72\pi$     B)  $90\pi$     C)  $120\pi$     D)  $144\pi$     E)  $150\pi$

34.



$$[OA] \perp [OB]$$

$$[OB] \perp [BC]$$

$$|OA| = 6 \text{ br}$$

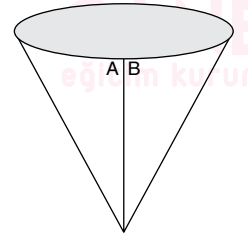
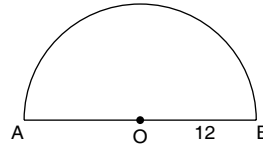
$$|BC| = 3 \text{ br}$$

$$|OB| = 8 \text{ br}$$

olduğuna göre şekildeki kesik koninin hacmi kaç  $\text{br}^3$  tür?  
(volume of truncated cone?)

- A)  $112\pi$     B)  $156\pi$     C)  $168\pi$     D)  $192\pi$     E)  $200\pi$

35.



Yarım daire şeklindeki karton parçası kıvrılarak dik koni haline getiriliyor.

(a semi-circle in figure curled and formed right cone)

$\Rightarrow$  **koninin taban alanı kaç  $\text{br}^2$  dir?**  
(bottom area of the cone?)

- A)  $24\pi$     B)  $36\pi$     C)  $42\pi$     D)  $56\pi$     E)  $64\pi$