

12.

$$16^{x+1} = 64^{y+1}$$

$$y = ?$$

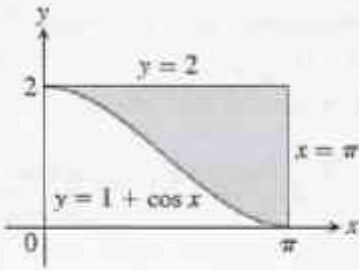
- A)  $\frac{2x-1}{3}$  B)  $\frac{2x+1}{3}$  C)  $\frac{3x-1}{2}$   
 D)  $\frac{3x+1}{2}$  E)  $\frac{x+3}{2}$

23.

$$\lim_{x \rightarrow a} \frac{3\sqrt{x} - 3\sqrt{a}}{x - a} = ?$$

- A)  $\frac{3}{2}$  B)  $\frac{3a}{2}$  C)  $\frac{3}{2\sqrt{a}}$   
 D)  $\frac{2\sqrt{a}}{3}$  E)  $\frac{2a}{3}$

25.



Yukarıdaki şekilde taralı bölgenin alanı aşağıdakilerden hangisidir?

Which of the following is the area of the shaded region?

- A)  $\int_0^{\pi} (1 + \cos x) dx - 2\pi$   
 B)  $2\pi - \int_0^{\pi} (1 + \cos x) dx$   
 C)  $2\pi - \int_0^{\pi} (1 + \cos x) dx$   
 D)  $\int_0^{\pi} (1 + \cos x) dx$   
 E)  $\int_0^{\pi} (1 + \cos x) dx$

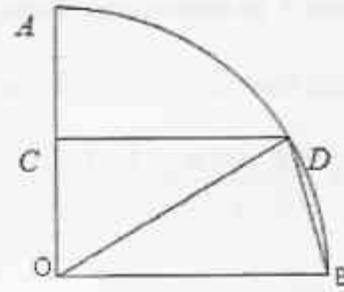
21.

$$f(x) = \cos^2(5x^2)$$

$$f'(x) = ?$$

- A)  $-20x \sin(10x^2)$  B)  $-10x \sin(10x^2)$   
 C)  $-x \sin(5x^2)$  D)  $10x \sin(10x)$   
 E)  $20x \sin(10x^2)$

38.



$$CD \parallel OB$$

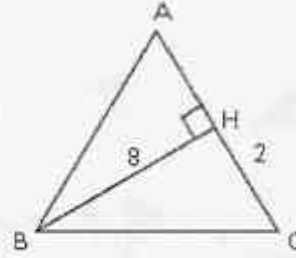
$$|AC| = |OC|$$

$$m(\widehat{BDO}) = ?$$

Yukarıda O merkezli bir çeyrek daire verilmiştir.  
 The quarter of a circle with center O is given above.

- A) 15 B) 30 C) 45 D) 60 E) 75

39.



$$|AB| = |AC|$$

$$|BH| \perp |AC|$$

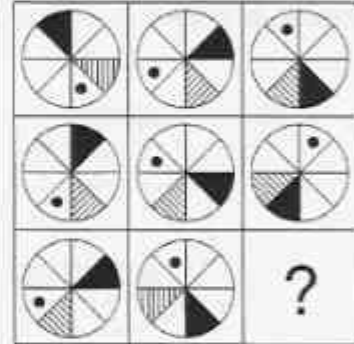
$$|HC| = 2 \text{ cm}$$

$$|BH| = 8 \text{ cm}$$

$$|AH| = x = ?$$

- A) 9 B) 10 C) 12 D) 13 E) 15

43.

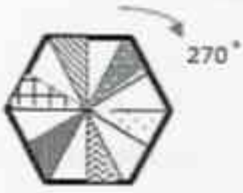


Verilen şekil matrisinde "?" yerine hangi şeklin getirilmesi gerektiğini bulunuz.

Find the figure which the question mark stands for in the given figure matrix.

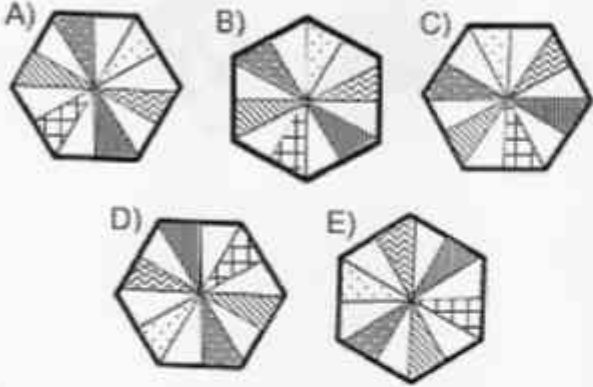
- A) B)   
 C) D)   
 E)

54.

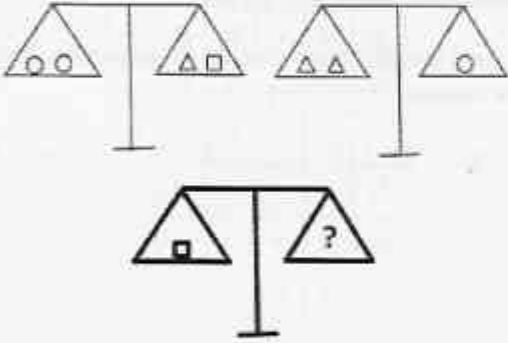


Yukarıda verilen şekil ok yönünde 270° döndürülürse aşağıdaki şekillerden hangisi oluşur?

Which of the following figures is occure, if the figure given above is rotated 270° in direction of the arrow?



62.



Yukarıdaki terazilerin üçü de dengede olduğuna göre III. terazide "?" yerine aşağıdakilerden hangisi gelmelidir?

All three scales above are in balance. Accordingly, which of the following does the question mark stand for in the third scale?

- A) O B) ΔOΔ C) OOΔ D) ΔΔΔ E) ΔΔO

68.

