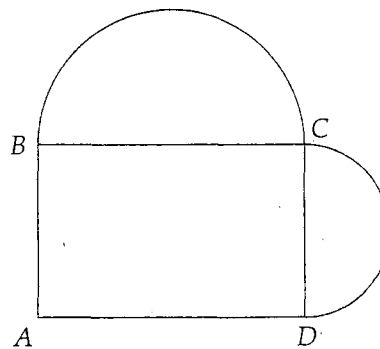


- 1) If the circle with center O has a diameter of 9, then what is the area of the circle with center O ?

- (A) 81π
- (B) $\frac{9}{2}\pi$
- (C) $\frac{81}{4}\pi$
- (D) 18π
- (E) 9π

4)

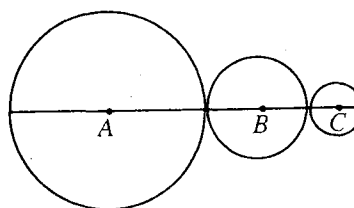


In the figure above, if semicircular arc BC has length 6π and semicircular arc CD has length 4π , what is the area of rectangle $ABCD$?

- 2) Point K lies outside the circle with center C such that $CK = 26$. \overline{JK} is tangent to the circle at point J , and the distance from J to K is 2 less than the distance from K to C . What is the circumference of the circle?

- (A) 10π
- (B) 15π
- (C) 20π
- (D) 22π
- (E) 24π

5)



In the figure above, the radius of the circle with center A is twice the radius of the circle with center B and four times the radius of the circle with center C . If the sum of the areas of the three circles is 84π , what is the length of \overline{AC} ?

- 3) What is the diameter of a circle with a circumference of 5?

- (A) $\frac{5}{\pi}$
- (B) $\frac{10}{\pi}$
- (C) 5
- (D) 5π
- (E) 10π