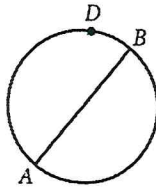


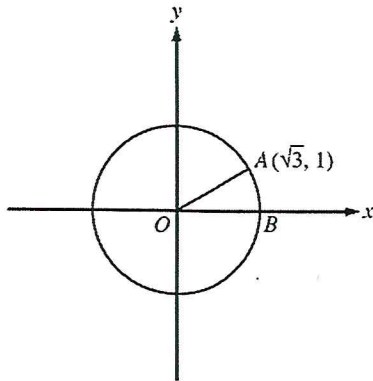
24



In the circle above, segment AB is a diameter. If the length of arc \widehat{ADB} is 8π , what is the length of the radius of the circle?

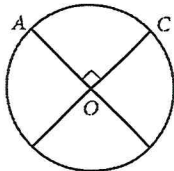
- A) 2
- B) 4
- C) 8
- D) 16

19



In the xy -plane above, O is the center of the circle, and the measure of $\angle AOB$ is $\frac{\pi}{a}$ radians. What is the value of a ?

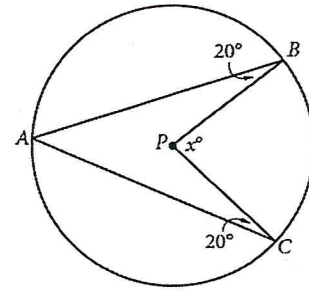
2



The circle above with center O has a circumference of 36. What is the length of minor arc \widehat{AC} ?

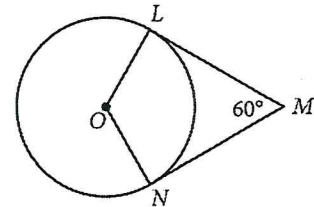
- A) 9
- B) 12
- C) 18
- D) 36

36



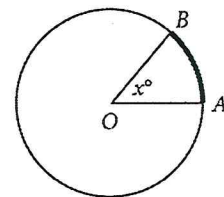
Point P is the center of the circle in the figure above. What is the value of x ?

36



In the figure above, point O is the center of the circle, line segments LM and MN are tangent to the circle at points L and N , respectively, and the segments intersect at point M as shown. If the circumference of the circle is 96, what is the length of minor arc \widehat{LN} ?

36



Note: Figure not drawn to scale.

In the figure above, the circle has center O and has radius 10. If the length of arc \widehat{AB} (shown in bold) is between 5 and 6, what is one possible integer value of x ?