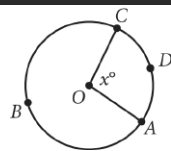


Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	■ ■ ■

ID: c8345903



The circle above has center O , the length of arc $\widehat{ADC}$ is 5π , and

$x = 100$. What is the length of arc $\widehat{ABC}$?

- A. 9π
- B. 13π
- C. 18π
- D. $\frac{13}{2}\pi$

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: 2266984b

$$x^2 + 20x + y^2 + 16y = -20$$

The equation above defines a circle in the xy -plane. What are the coordinates of the center of the circle?

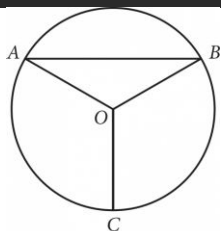
- A. $(-20, -16)$
- B. $(-10, -8)$
- C. $(10, 8)$
- D. $(20, 16)$

Question ID 69b0d79d

3.3

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	■ ■ ■

ID: 69b0d79d



Point O is the center of the circle above, and the measure of $\angle OAB$ is 30° .

If the length of $\overline{OC}$ is 18, what is the length of arc $\widehat{AB}$?

- A. 9π
- B. 12π
- C. 15π
- D. 18π

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: ab176ad6

The equation $(x + 6)^2 + (y + 3)^2 = 121$ defines a circle in the xy -plane. What is the radius of the circle?

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: 3e577e4a

A circle in the xy -plane has its center at $(-4, -6)$. Line k is tangent to this circle at the point $(-7, -7)$. What is the slope of line k ?

- A. -3
- B. $-\frac{1}{3}$
- C. $\frac{1}{3}$
- D. 3

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: 9e44284b

In the xy -plane, the graph of $2x^2 - 6x + 2y^2 + 2y = 45$ is a circle. What is the radius of the circle?

- A. 5
- B. 6.5
- C. $\sqrt{40}$
- D. $\sqrt{50}$

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: ca2235f6

A circle has center O , and points A and B lie on the circle. The measure of arc AB is 45° and the length of arc AB is 3 inches. What is the circumference, in inches, of the circle?

- A. 3
- B. 6
- C. 9
- D. 24

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: 981275d2

$(x - 6)^2 + (y + 5)^2 = 16$

In the xy -plane, the graph of the equation above is a circle. Point P is on the circle and has coordinates $(10, -5)$. If $\overline{PQ}$ is a diameter of the circle, what are the coordinates of point Q ?

- A. $(2, -5)$
- B. $(6, -1)$
- C. $(6, -5)$
- D. $(6, -9)$

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: 89661424

A circle in the xy -plane has its center at $(-5, 2)$ and has a radius of 9 . An equation of this circle is $x^2 + y^2 + ax + by + c = 0$, where a , b , and c are constants. What is the value of c ?

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: fb58c0db

Points A and B lie on a circle with radius 1, and arc $\overline{AB}$ has length $\frac{\pi}{3}$.
What fraction of the circumference of the circle is the length of arc $\overline{AB}$?

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Circles	

ID: acd30391

A circle in the xy -plane has equation $(x+3)^2 + (y-1)^2 = 25$. Which of the following points does NOT lie in the interior of the circle?

- A. $(-7, 3)$
- B. $(-3, 1)$
- C. $(0, 0)$
- D. $(3, 2)$