Question ID ffc88014

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

ID: ffc88014

The measure of angle Z is 60°. What is the measure, in radians, of angle Z?

A. $\frac{1}{6}\pi$

B. $\frac{1}{3}\pi$

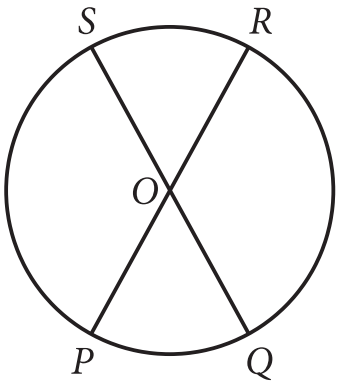
C. $\frac{2}{3}\pi$

D. 1π

Question ID 4ff588cd

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

ID: 4ff588cd



Note: Figure not drawn to scale.

The circle shown has center O, circumference 144π, and diameters $\overline{PR}$ and $\overline{QS}$. The length of arc PS is twice the length of arc PQ. What is the length of arc QR?

A. 24π

B. 48π

C. 72π

D. 96π

Question ID f009297f

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

ID: f009297f

In the *xy*-plane, the graph of the equation $(x-3)^2+(y-5)^2=9$ is a circle. The point $(6, c)$, where c is a constant, lies on this circle. What is the value of c?

Question ID 8e79ef1c

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

ID: 8e79ef1c

An angle has a measure of $\frac{9\pi}{20}$ radians. What is the measure of the angle in degrees?

Question ID 0ce06a95

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

ID: 0ce06a95

A circle in the *xy*-plane has the equation $(x-13)^2+(y-k)^2=64$. Which of the following gives the center of the circle and its radius?

A. The center is at $(13, k)$ and the radius is 8.

B. The center is at $(k, 13)$ and the radius is 8.

C. The center is at $(k, 13)$ and the radius is 64.

D. The center is at $(13, k)$ and the radius is 64.

Question ID 98d85e86

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

ID: 98d85e86

What is the center of the circle in the *xy*-plane defined by the equation $(x-1)^2+(y+7)^2=1$?

A. $(-1,-7)$

B. $(-1,7)$

C. $(1,-7)$

D. $(1,7)$

Question ID 88041348

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

ID: 88041348

A circle in the *xy*-plane has its center at $(-4, 5)$ and the point $(-8, 8)$ lies on the circle. Which equation represents this circle?

A. msup $+ (y + 5)^2 = 5$

B. msup $+ (y - 5)^2 = 5$

C. msup $+ (y + 5)^2 = 25$

D. msup $+ (y - 5)^2 = 25$

Question ID 43e876eb

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

ID: 43e876eb

$$x^2 + 58x + y^2 = 0$$

In the *xy*-plane, the graph of the given equation is a circle. What are the coordinates (x, y) of the center of the circle?

A. $(0, 29)$

B. $(0, -29)$

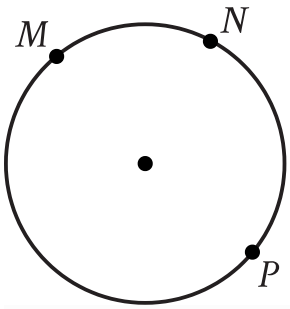
C. $(29, 0)$

D. $(-29, 0)$

Question ID 1f96ea4b

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

ID: 1f96ea4b



Points M, N, and P lie on the circle shown. On this circle, minor arc MN has a length of 39 centimeters and major arc MPN has a length of 195 centimeters. What is the circumference, in centimeters, of the circle shown?

A. 39

B. 156

C. 195

D. 234

Question ID 7ea88342

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

ID: 7ea88342

An angle has a measure of $\frac{16\pi}{15}$ radians. What is the measure of the angle, in degrees?

Question ID b2eb22ba

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

ID: b2eb22ba

The measure of angle R is $\frac{2\pi}{3}$ radians. The measure of angle T is $\frac{5\pi}{12}$ radians greater than the measure of angle R. What is the measure of angle T, in degrees?

A. 75

B. 120

C. 195

D. 390