

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

Rule of 3 or ໓໔໐໐

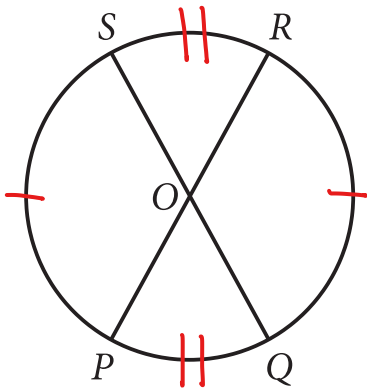
180 → π

60 → $\frac{\pi}{3}$ //

Question ID 4ff588cd

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ID: 4ff588cd



$\widehat{QR} = \widehat{PS}$

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

$\widehat{PS} = 2\widehat{PQ}$

$144\pi = 2\widehat{PS} + 2\widehat{PQ}$

$144\pi = 4\widehat{PQ} + 2\widehat{PQ}$

$144\pi = 6\widehat{PQ}$

$\widehat{PQ} = 24\pi$

$\widehat{PS} = 48\pi //$

Question ID f009297f

Assessment	Test	Domain	Skill	Difficulty
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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 ?

$$3^2 + (y - 5)^2 = 9$$

Desmos $\rightarrow y = 5$ (มองตอบก็ได้)
$$c = 5 //$$

Question ID 8e79ef1c

Assessment	Test	Domain	Skill	Difficulty
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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
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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?

- X

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.
- Center = $(13, k)$

$r = 8$

Question ID 98d85e86

Assessment	Test	Domain	Skill	Difficulty
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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. $(1, 7)$

center = $(1, -7)$ //

r = 1 (radius)

Question ID 88041348

Assessment	Test	Domain	Skill	Difficulty
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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. $(x - 4)^2 + (y + 5)^2 = 5$
- B. $(x + 4)^2 + (y - 5)^2 = 5$
- C. $(x - 4)^2 + (y + 5)^2 = 25$
- D. $(x + 4)^2 + (y - 5)^2 = 25$

Question ID 43e876eb

Assessment	Test	Domain	Skill	Difficulty
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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)~~

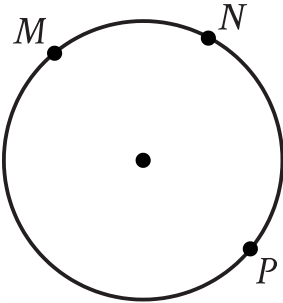
} ไม่มี By
ตัด A. และ B.

$(x + 29)^2 + y^2 = 29^2$
Center = $(-29, 0)$ //

Question ID 1f96ea4b

Assessment	Test	Domain	Skill	Difficulty
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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~~

$195 + 39 = 234 //$

Question ID 7ea88342

Assessment	Test	Domain	Skill	Difficulty
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ID: 7ea88342

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

$$\frac{16(180)}{15} = 192 //$$

Question ID b2eb22ba

Assessment	Test	Domain	Skill	Difficulty
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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

$R = 120$
 $T = 120 + 75 = 195 //$