

7.G.4

Work with circles.

a. Explore and understand the relationships among the circumference, diameter, area, and radius of a circle.

b. Know and use the formulas for the area and circumference of a circle and use them to solve real-world and mathematical problems.

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Calculator

OH.2025.Q43

A park has a square garden and a circular garden. The perimeter of the square garden is equal to the circumference of the circular garden. The area of the square garden is 36 square feet.

Which is the **best** approximation of the difference between the areas of the two gardens?

A 10 square feet

B 24 square feet

C 36 square feet

D 46 square feet

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Calculator Neutral

OH.2024.Q24

A circle has a diameter of 12 units.

What is the circumference, in units, of the circle?

Ⓐ 6π

Ⓑ 12π

Ⓒ 36π

Ⓓ 144π

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Calculator

OH.2023.Q35

Which statement describes how to use the circumference of a circle to find its area?

Ⓐ divide the circumference by 2

Ⓑ multiply the circumference by the radius

Ⓒ divide the circumference by π and then divide by 2

Ⓓ divide the circumference by 2 and then multiply by the radius

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Calculator

OH.2022.Q45

The circumference of a circle is 50.24 centimeters.

What is the radius, rounded to the nearest tenth of a centimeter, of the circle?

centimeters

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Calculator

OH.2021.Q39

The radius of a circle is 20 centimeters.

What is the circumference, in centimeters, of the circle? Round your answer to the nearest tenth.

centimeters

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Calculator Neutral

OH.2019.Q4

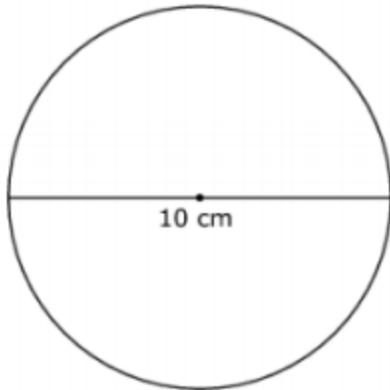
Which expression represents the area of a circle with a radius of 7 units?

- (A) $7 \cdot 2 \cdot \pi$
- (B) $7 \cdot 7 \cdot \pi$
- (C) $7 \cdot \pi \cdot \pi$
- (D) $3.5 \cdot 3.5 \cdot \pi$

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OH.2016.Q7

A circle is shown.



What is the circumference of the circle, to the nearest tenth of a centimeter?

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OH.2016.Q14

The circumference of a circle is 18.84 inches.

What is the diameter of the circle, to the nearest inch?

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OH.PT.Q19

A circle has a diameter of 7.2 inches.

What is the circumference of the circle, rounded to the nearest tenth of an inch?

inches