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.

7.G.4 Calculator OH.2026.Q49

The circumference of a circle is 32π centimeters.

What is the area, in square centimeters, of the circle?

Ⓐ 16π

Ⓑ 64π

Ⓒ 256π

Ⓓ 1024π

7.G.4 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

A circle has a diameter of 12 units.

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

Ⓐ 6π

Ⓑ 12π

Ⓒ 36π

Ⓓ 144π

7.G.4 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

7.G.4 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*

7.G.4 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*

7.G.4 Calculator Neutral OH.2019.Q4

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

(A) $7 \bullet 2 \bullet \pi$

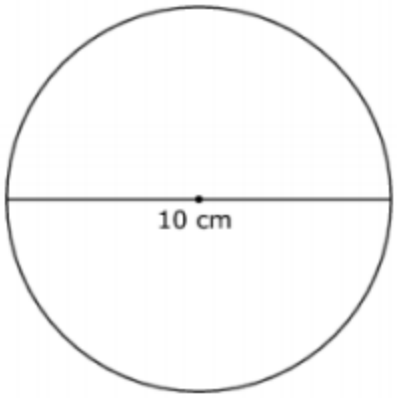
(B) $7 \bullet 7 \bullet \pi$

(C) $7 \bullet \pi \bullet \pi$

(D) $3.5 \bullet 3.5 \bullet \pi$

7.G.4 OH.2016.Q7

A circle is shown.



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

7.G.4

OH.2016.Q14

The circumference of a circle is 18.84 inches.

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

7.G.4

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