

Name: _____

Lesson Guide

This lesson guide accompanies the following video lesson:

Circumference and Area of Circles

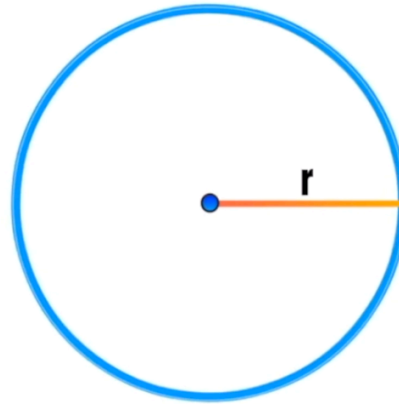


Key Questions

- What are the properties of a circle?
- How can you find the circumference of a circle?
- How can you find the area of a circle?

Circumference

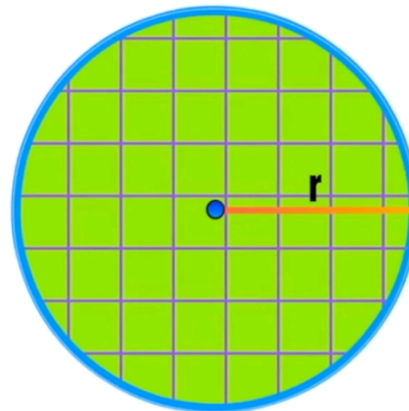
$$C = 2\pi r$$



The circumference of a circle is the length of the line on the _____ of a circle. Circumference represents the perimeter of a circle.

Area

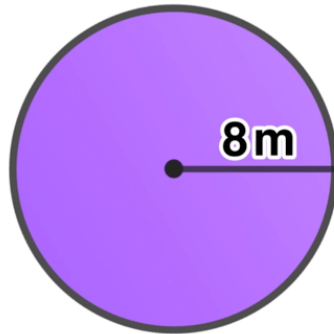
$$A = \pi r^2$$



The area of a circle represents how many square units it would take to fill in the entire _____ of a circle.

Practice Problem #1

Find the circumference and area of a circle with a radius of 8 meters.



$$r = \underline{\hspace{2cm}}$$

Circumference

$$C = 2\pi r$$

Area

$$A = \pi r^2$$

Practice Problem #2

Find the circumference and area of a circle with a diameter of 24 inches.



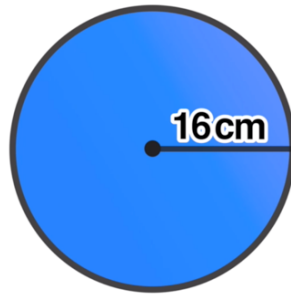
$$r = \underline{\hspace{2cm}}$$

Circumference

Area

TRY ON YOUR OWN!

Find the circumference and area of a circle with a radius of 16 cm.



$r =$ _____

Circumference

Area

EXTRA PRACTICE

Part I: Find the Area of Each Circle:

1.) radius=10 cm

2.) diameter = 22 km

3.) radius= 2 yd

4.) diameter = 10.2 ft

Part II: Find the Circumference of Each Circle:

5.) radius=8.4 cm

6.) diameter = 14 km

7.) radius= 9.4 mm

8.) diameter = 4.4 ft

ANSWER KEY

Practice Problem #1: $C = 50.3m$ $A = 201.1m^2$

Practice Problem #2 $C = 75.4in$ $A = 452.4in^2$

Try On Your Own: $C = 100.5cm$ $A = 804.2cm^2$

Extra Practice:

1.) $A = 314.2 cm^2$

2.) $A = 380.1 km^2$

3.) $A = 12.6 yd^2$

4.) $A = 81.7 ft^2$

5.) $C = 52.8 cm$

6.) $C = 44 km$

7.) $C = 59.1 mm$

8.) $C = 13.8 ft$