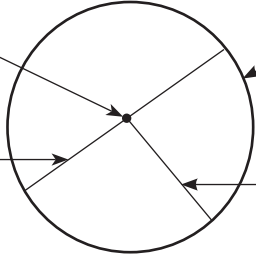


**Lesson 1 Reteach** Kbzoom**Circumference**


The **center** is the point in the middle of a circle.

The **diameter**,  $d$ , is the distance across a circle through its center.

The **radius**,  $r$ , is the distance from the center to any point on a circle.

The **circumference**,  $C$ , is the distance around a circle.

The diameter of a circle is twice its radius.  
The radius is half the diameter.  
The circumference of a circle is equal to  $\pi$  times its diameter or  $\pi$  times twice its radius.

$$d = 2r$$

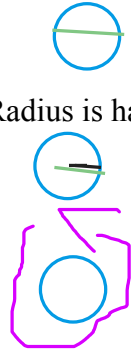
$$r = \frac{d}{2}$$

$$C = \pi d$$

$$C = 2\pi r$$

Diameter

Radius is half diameter



$$C = 2 \times r \times 3.14$$

$$C = 2 \times 3.14 \times r$$

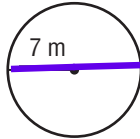
**Example 1****The radius of a circle is 7 meters. Find the diameter.**

$$d = 2r$$

$$d = 2 \cdot 7 \quad \text{Replace } r \text{ with 7.}$$

$$d = 14 \quad \text{Multiply.}$$

The diameter is 14 meters.

**Example 2****Find the circumference of a circle with a radius that is 13 inches. Use 3.14 for  $\pi$ . Round to the nearest tenth.**

$$C = 2\pi r$$

Write the formula.

$$C \approx 2 \times 3.14 \times 13$$

Replace  $r$  with 13 and  $\pi$  with 3.14.

$$C \approx 81.64$$

Multiply.

Rounded to the nearest tenth, the circumference is about 81.6 inches.

**Exercises****Find the circumference of each circle. Use 3.14 or  $\frac{22}{7}$  for  $\pi$ . Round to the nearest tenth if necessary.**