Lesson 1: Circumference

Objective:

Find the circumference of circles

By Miss **Aaesha Bani Shemaili**

Vocabulary Start-Up

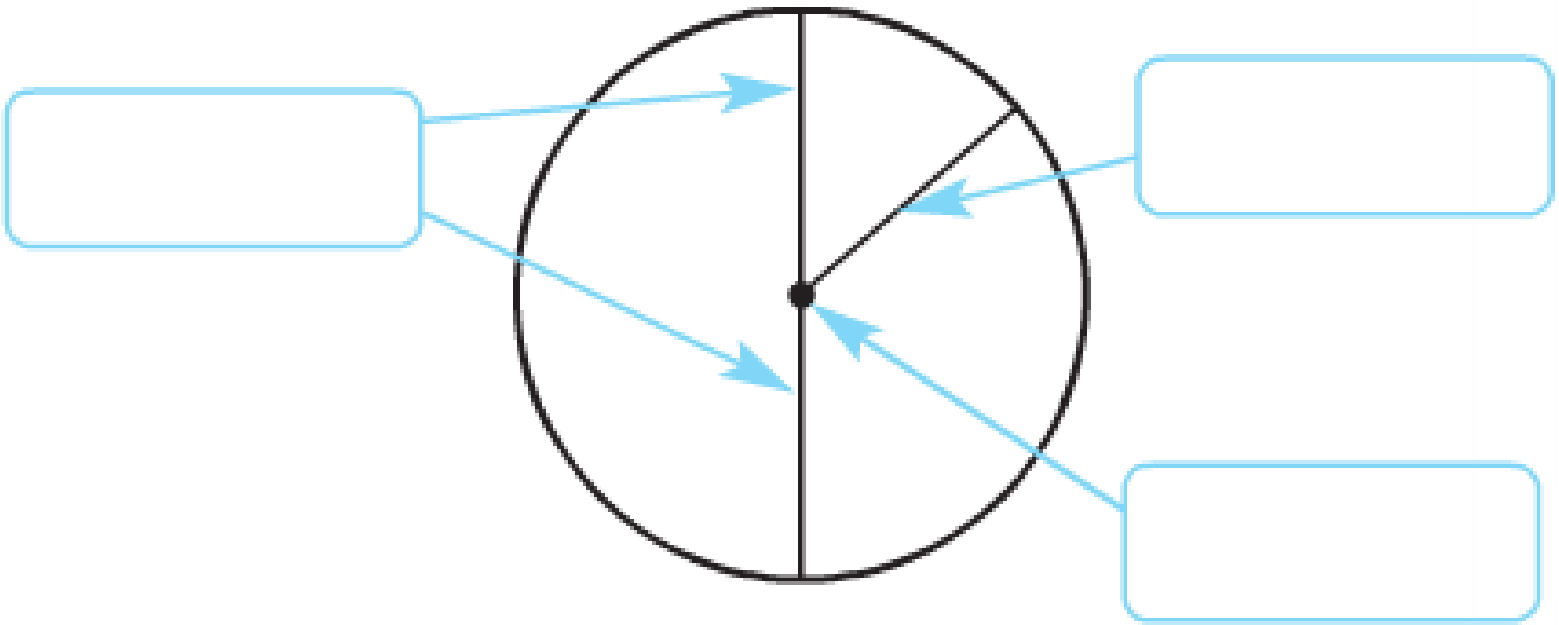
A **circle** is the set of all points in a plane that are the same distance from a point, called the **center**. The **circumference** is the distance around a circle. The **diameter** is the distance across a circle through its center. The **radius** is the distance from the center to any point on the circle.

Fill in each box with one of the following terms: *center*, *diameter*, and *radius*.

Center	Circumference
Diameter (d)	Radius (r)

Vocabulary Start-Up

Fill in each box with one of the following terms: *center*, *diameter*, and *radius*.



- What the relationship between (d) & (R):

Circumference (in.)	Diameter (in.)	Radius (in.)
9.4	3	1.5
37.7	12	6
62.8	20	10

Radius and Diameter

Words The diameter d of a circle is twice its radius r. The radius r of a circle is half of its diameter d.

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

Examples

1. **The diameter of a circle is 14 inches. Find the radius.**

$r = \frac{d}{2}$ Radius of circle

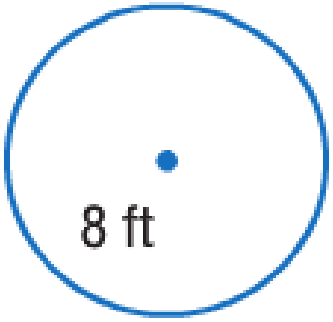
$r = \frac{14}{2}$ Replace d with 14.

$r = 7$ Divide.

The radius is 7 inches.

Examples

2. The radius of a circle is 8 feet. Find the diameter.



$d = 2r$ Diameter of circle

$d = 2 \cdot 8$ Replace r with 8.

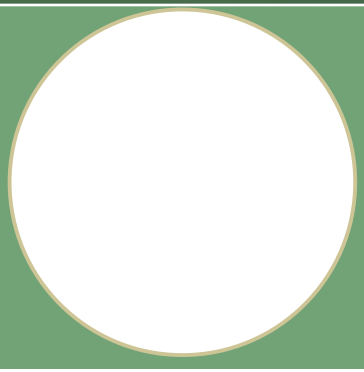
$d = 16$ Multiply.

The diameter is 16 feet.

Got It? Do these problems to find out.

a. d=23 cm

Got It? Do these problems to find out.

b. r= 3 in.	
c. d=16 yd	
d. r=5.2	