8.1 Circles and Circumference

<u>**circle**</u> – the set of all points that are the same distance from a point called the center

<u>**radius**</u> – the distance from the center to any point on the circle

<u>**diameter**</u> – the distance across the circle through the center
       (twice as long as the radius)

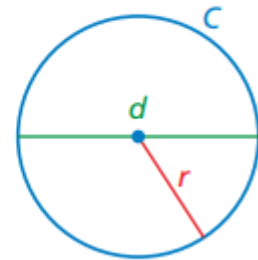<u>**circumference**</u> – the distance around a circle (like perimeter)
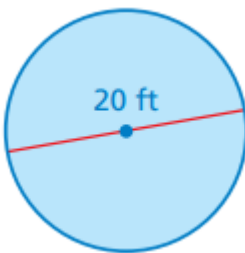
Key Idea

Circumference of a Circle

Words The circumference C of a circle is equal to π times the diameter d or π times twice the radius r.
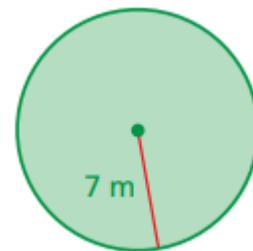
Algebra $C = \pi d$ or $C = 2\pi r$

<u>Ex</u>: Find the radius.

20 ft

<u>Ex</u>: Find the diameter.

7 m

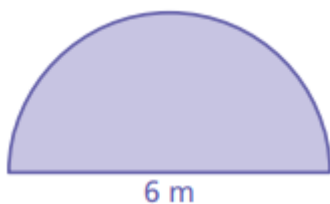Find each circumference. Round to the nearest hundredth.

Ex:

5 in.

Ex:

28 mm

Find each perimeter. Round to the nearest hundredth.

Ex:

6 m

Ex:

15 in.