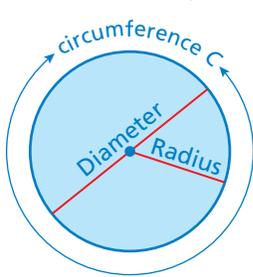


# REVIEW: Circles and Circumference

Name \_\_\_\_\_

## Key Concept and Vocabulary



$$C = \pi d$$

$$C = 2\pi r$$

$$\pi \approx 3.14$$

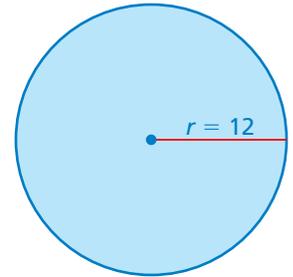
$$\pi \approx \frac{22}{7}$$



## Visual Model

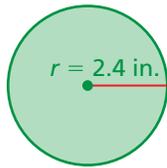
Circumference of a Circle:

$$\begin{aligned} C &= 2\pi r \\ &= 2\pi(12) \\ &= 24\pi \\ &\approx 75.4 \end{aligned}$$



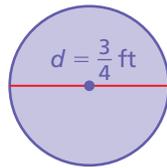
## Skill Examples

1.



$$\begin{aligned} C &= 2\pi(2.4) \\ &= 4.8\pi \\ &\approx 15.1 \text{ in.} \end{aligned}$$

2.

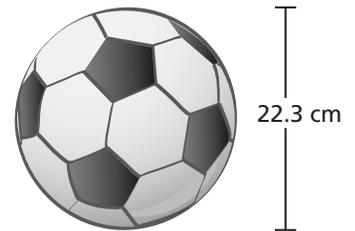


$$\begin{aligned} C &= \pi\left(\frac{3}{4}\right) \\ &\approx 2.4 \text{ ft} \end{aligned}$$

## Application Example

3. Find the distance around the soccer ball.

$$\begin{aligned} C &= \pi(22.3) \\ &\approx 70.0 \text{ cm} \end{aligned}$$



∴ The distance is about 70 centimeters.

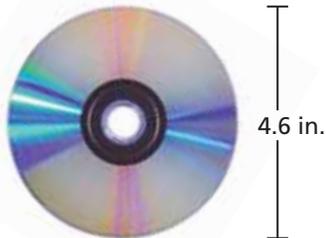
## PRACTICE MAKES PURR-FECT™



Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

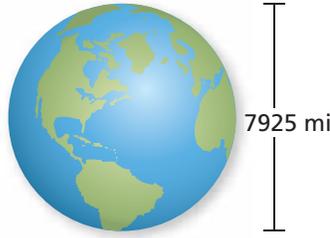
Find the circumference. Round your answer to the nearest tenth.

4.



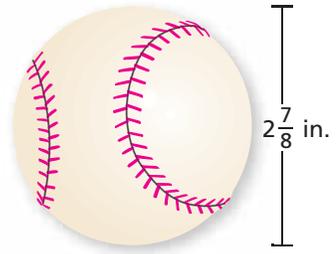
Circumference  $\approx$  14.4 in.

5.



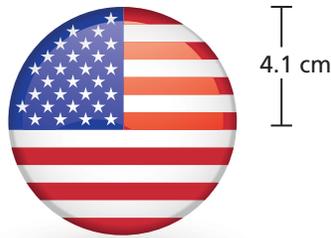
Circumference  $\approx$  24,884.5 mi

6.



Circumference  $\approx$  9.0 in.

7.



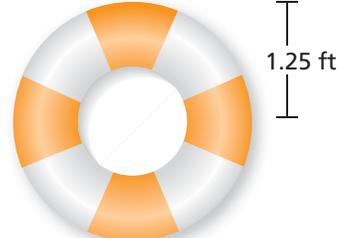
Circumference  $\approx$  25.7 cm

8.



Circumference  $\approx$  2.6 in.

9.



Circumference  $\approx$  7.9 ft

10. **RACETRACK** A circular racetrack has a circumference of one mile. What is the diameter of the racetrack in feet? about 1681.5 ft

11. **OLD OAK TREE** You have 110 inches of yellow ribbon. The diameter of the old oak tree is 38 inches. Do you have enough yellow ribbon to wrap around the old oak tree? Explain.  
no; The circumference of the tree is  $\pi(38) \approx 119.3 > 110$ .