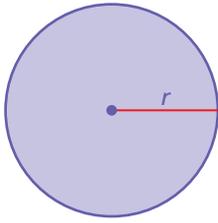# REVIEW: Areas of Circles

Key Concept and Vocabulary

$A = \pi r^2$

$\pi \approx 3.14$

$\pi \approx \dfrac{22}{7}$
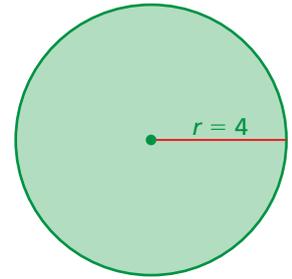
Area

Visual Model

Area of a Circle:
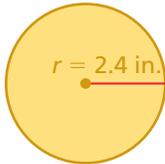
$A = \pi r^2$

$= \pi(4)^2$

$= \pi(16)$

≈ 50.2

$r = 4$

Skill Examples

1.

$r = 2.4$ in.

$A = \pi(2.4)^2$

≈ 18.1 in.²

2.

$d = \dfrac{3}{4}$ ft
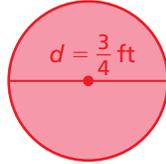
$A = \pi\left(\dfrac{3}{8}\right)^2$

≈ 0.4 ft²

Application Example

3. Find the area of a dime.

$A = \pi(0.9)^2$

≈ 2.5 cm²

1.8 cm

⁝∴ The area is about 2.5 square centimeters.
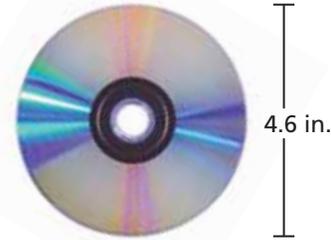
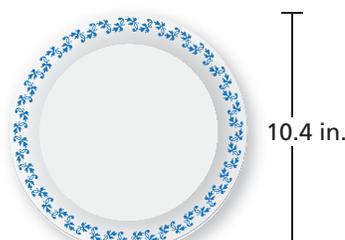## PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.
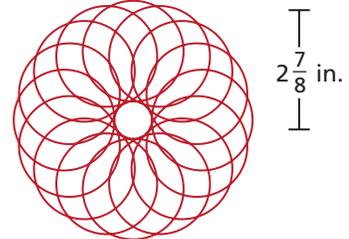
Find the area. Round your answer to the nearest tenth.

4.

4.6 in.

Area ≈ __16.6 in.²__

5.

10.4 in.

Area ≈ __84.9 in.²__

6.

$2\dfrac{7}{8}$ in.

Area ≈ __26.0 in.²__

7.

4.1 cm

Area ≈ __52.8 cm²__

8.

1.5 ft

Area ≈ __3.5 ft²__

9.

1.5 ft

1.5 ft
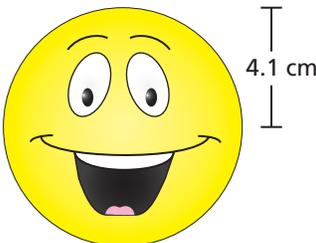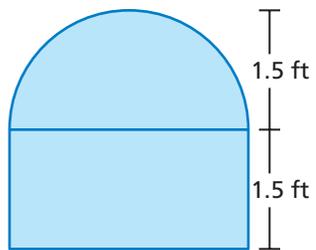
Area ≈ __8.0 ft²__

10. BASKETBALL Find the area of the center circle on a basketball court. __about 113.0 ft²__

11. BASKETBALL Find the area of a free throw region on a basketball court. __about 56.5 ft²__

center circle

12 ft

free throw