7-1 Skills Practice: *Circumference & Area of Circles*   **Math8**

Show work for all problems!

1. **Find the circumference of each circle. Use 3.14 for π. Round to the nearest tenth.**

   a.   b.   c.   d.

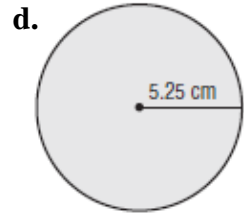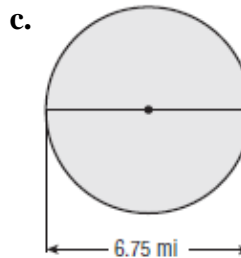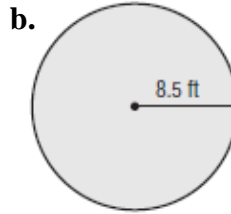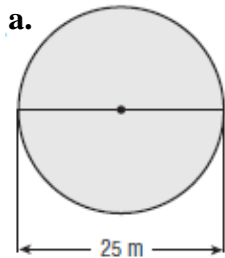   10 in.   14 mm   22 yd   25 m

2. **Find the area of each circle. Use 3.14 for π. Round to the nearest tenth.**

   a.   b.   c.   d.

   25 m   8.5 ft   6.75 mi   5.25 cm
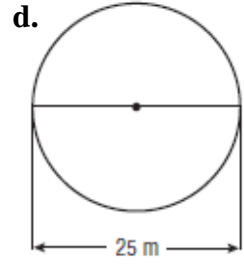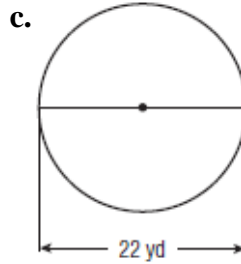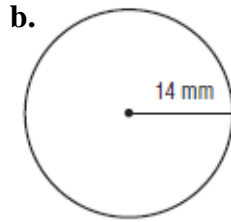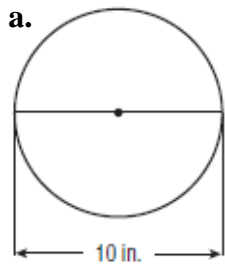
3. **Find the area of each circle. Use 3.14 for π. Round to the nearest tenth.**

   a. The diameter is 8 centimeters.   c. The radius is 4.7 inches.

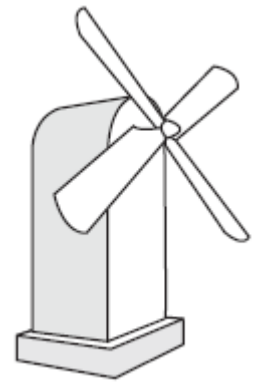   b. The radius is 0.9 feet.   d. The diameter is 6.8 kilometers.

4. **Another approximate value for π is $\frac{22}{7}$. Use this value to find the circumference and area of each circle.**

   a. The diameter is 14 yards.   b. The radius is $1\frac{1}{6}$ millimeters.

5. Each sail on a windmill is 5 meters in length. How much area do the wings cover as they turn from the force of the wind?

6. Find the radius of a circle if its area is 314 square miles.

7. The circular fountain in front of the courthouse has a radius of 9.4 feet. What is the circumference of the fountain? Round to the nearest tenth.

8. A dog is leashed to a point in the center of a large yard, so the area the dog is able to explore is circular. The leash is 20 feet long. What is the area of the region the dog is able to explore? Round to the nearest tenth.

9. A bicycle tire has a radius of $13\frac{1}{4}$ inches. How far will the bicycle travel in 40 rotations of the tire? Round to the nearest tenth.