Name _____ Date _____

Pi, Circumference, and Diameter: **Lesson 1**

Complete each statement about the properties of circles. Write *center, chord, circle, congruent, diameter,* or *radius* in each blank.

1. A plane figure is formed by all the points that lie the same distance from a center point. The figure is a _____.

2. A line segment has one endpoint on a circle and the other endpoint at the center of the circle. The line segment is a _____.

3. A line segment has both endpoints on a circle. The line segment is a _____.

4. A line segment has both endpoints on a circle. It passes through the center of the circle. The line segment is a _____.

5. Two line segments are radii of the same circle. The line segments must be _____.

6. A line segment is the longest possible chord in a circle. The line segment is a _____.

7. A line segment is a diameter of a circle. The line segment is twice the length of a _____ of the circle.

8. Two points lie on the same circle. Both points are the same distance from the _____ of the circle.

9. A chord divides a circle in half. The chord is the _____ of the circle.

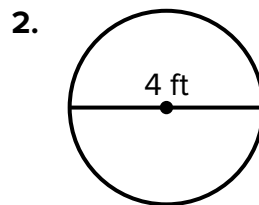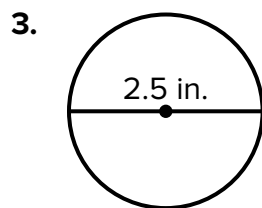10. A line segment is a radius of a circle. The line segment is half the length of the circle's _____.
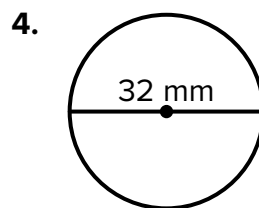
Pi, Circumference, and Diameter: **Lesson 2**

Determine the circumference of each circle. Use 3.14 for π. Round to the nearest whole unit.

1.

10 cm

_____

2.

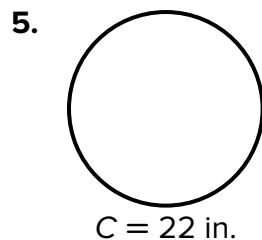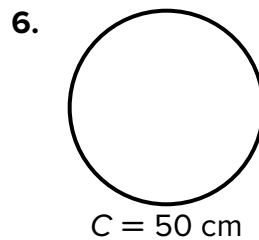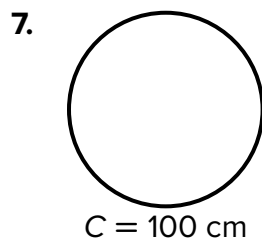4 ft

_____

3.

2.5 in.

_____

4.

32 mm

_____
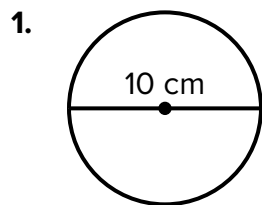
Determine the diameter of each circle. Use 3.14 for π. Round to the nearest whole unit.
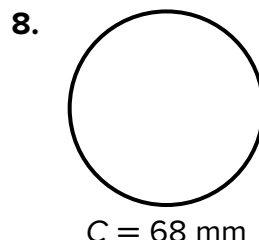
5.

$C = 22$ in.

_____

6.

$C = 50$ cm

_____

7.

$C = 100$ cm

_____
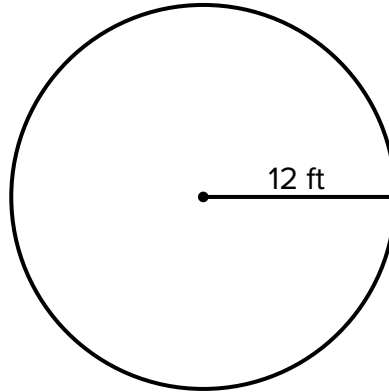
8.

$C = 68$ mm

_____

Name _____ Date _____

Pi, Circumference, and Diameter: **Lesson 3**

Determine the area of each circle. Use 3.14 for π. Show your work.
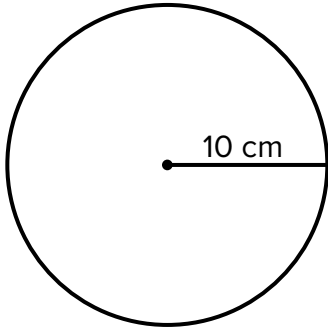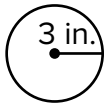
1.

10 cm

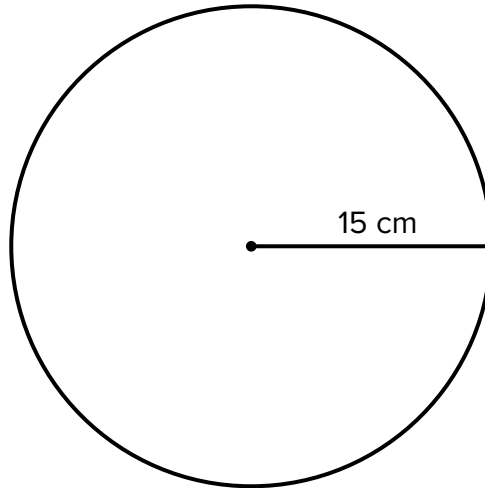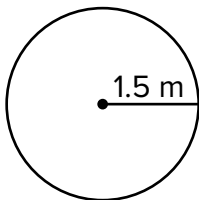_____

2.

12 ft

_____

3.

3 in.

_____

4.

15 cm

_____

5.

1.5 m

_____

Pi, Circumference, and Diameter: **Lesson 4**

Solve each problem. Use 3.14 for π.

1. A paint can has a circular lid with a radius of 3 inches. What is the area of the lid?

   _____

2. A circular bracelet has a diameter of 8 centimeters. What is the circumference of the bracelet?

   _____

3. A circular patio has a radius of 6 feet. What is the distance around the patio?

   _____

4. A circular baby pool has a radius of 2 meters. How much space on the ground does the baby pool cover?

   _____

5. The diameter of a dinner plate is 25 centimeters. The diameter of a dessert plate is 20 centimeters. What is the difference in the circumferences of the two plates?

   _____

6. The circular broadcast signal for a radio station reaches a radius of between 10 and 12 miles. What are the least and greatest number of square miles the broadcast covers?

   _____