Name_____ Date _____

11.1 Practice WS

In Exercises 1–4, find the indicated measure. Draw and label your image.

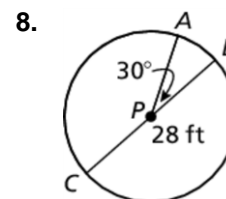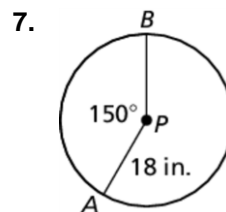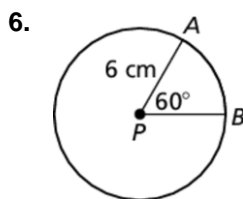1. radius of a circle with a circumference of 42π meters

2. circumference of a circle with a radius of 27 feet

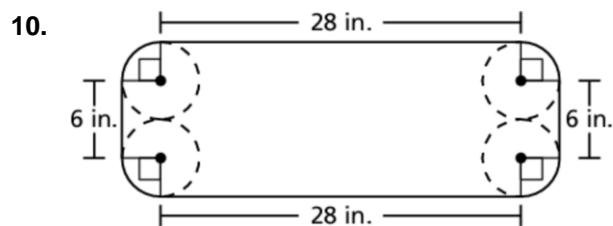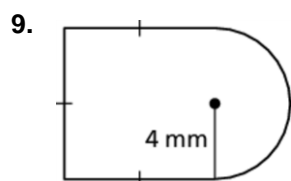3. circumference of a circle with a diameter of 15 inches

4. diameter of a circle with circumference 39 centimeters

5. Maple trees suitable for tapping for syrup should be at least 1.5 feet in diameter. You wrap a rope around a tree trunk, then measure the length of the rope needed to wrap one time around the trunk. This length is 4 feet 2 inches. Explain how you can use this length to determine whether the tree is suitable for tapping.

In Exercises 6–8, find the <u>arc length</u> of AB.

6.

6 cm A
60°
P B

7.

B
150° P
18 in.
A

8.

A
30°
B
P
28 ft
C

In Exercises 9 and 10, find the perimeter of the region.

9.

4 mm

10.

28 in.

6 in.   6 in.

28 in.

In Exercises 11 and 12, convert the angle measure.

11. Convert $60°$ to radians.

12. Convert $\dfrac{5\pi}{4}$ radians to degrees.

13. A carousel has a diameter of 50 feet. To the nearest foot, how far does a child seated near the outer edge travel when the carousel makes 8 revolutions?

50 ft