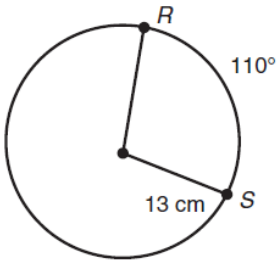
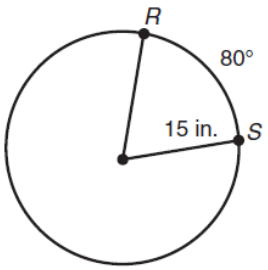
Name: _____

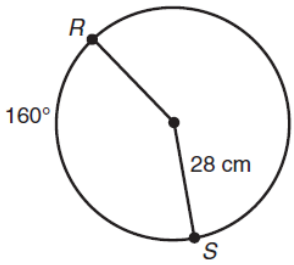
12.2 ~ ARC LENGTH

Past due on: _____ Period: _____

Find the length of $\widehat{RS}$. Express your answer in terms of π and expressed as a decimal rounded to the nearest hundredth.

1. 

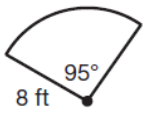
2. 

3. 

4. If the measure of $\widehat{KL}$ is 15° and the diameter is 18 feet, what is the arc length of $\widehat{KL}$ to the nearest hundredth of a foot?

5. If the measure of $\widehat{OP}$ is 165° and the diameter is 21 centimeters, what is the arc length of $\widehat{OP}$ to the nearest hundredth of a centimeter?

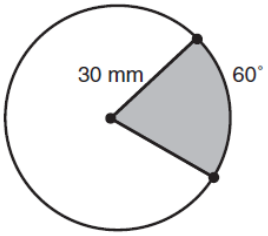
6. Charlie would like to put edging along the circular edge of her flower garden. At the right is a diagram of her flower garden. How much edging will she need if she just puts it along the circle part? Round your answer to the nearest hundredth if necessary.



7. Sam used a tape measure and determined the circumference of a flagpole to be 6.2 inches. What is the radius of the flagpole to nearest tenth of an inch?

8. Dean used a string and a tape measure to determine the circumference of a circular cap to be 12.56 inches. What is the radius of the cup to the nearest tenth of an inch?

9. Determine the perimeter of the shaded region. Round your answer to the nearest hundredth of a millimeter.



10. Determine the perimeter of the figure below. Round your answer to the nearest hundredth of a centimeter.