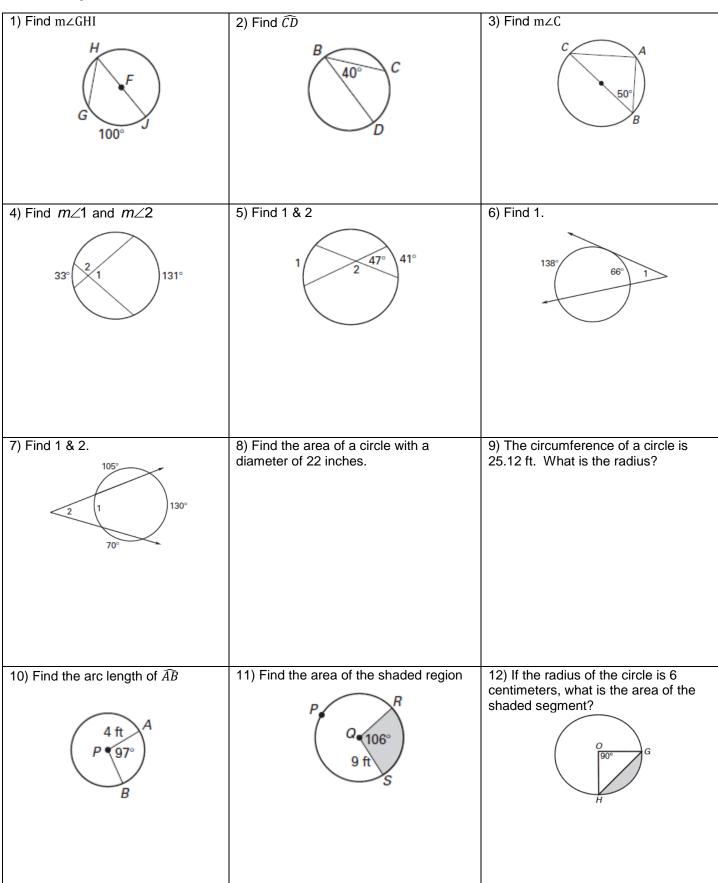
Name: _____

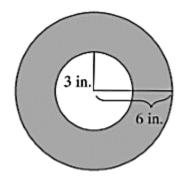
Vocabulary: Inscribed angle, central angle, arc measure, sector, arc length.



1) An insulated foam sleeve is made to fit over a water pipe. The distance from the center of the water pipe to the edge of the sleeve is 6 inches. The hole in the center has a radius of 3 inches. What is the area of the face of the foam sleeve?

1) ____

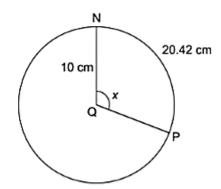
- A. $9.42 in^2$
- B. $18.84 in^2$
- C. $84.78 in^2$
- D. 141.30 in²



2) This circle, with center point Q, has a radius of 10 centimeters. The length of the minor arc NP is 20.42 centimeters. To the nearest degree, what is the value of x?



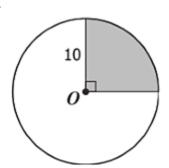
- A. 110°
- B. 117°
- C. 204°
- D. 233°



3) Find the area of the shaded sector of circle O.

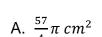


- B. 20π
- C. 25π
- D. 50π

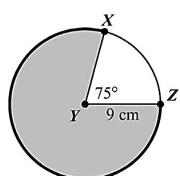


3) ___

4) What is the area of the shaded part of the circle?

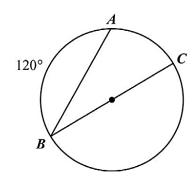


- A. $\frac{57}{4}\pi \ cm^2$ B. $\frac{135}{8}\pi \ cm^2$ C. $\frac{405}{8}\pi \ cm^2$ D. $\frac{513}{8}\pi \ cm^2$



4) ___

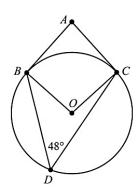
- 5) What is the measure of $\angle ABC$?
 - A. 15°
 - B. 30°
 - C. 60°
 - D. 120°



5) ____

6) In this circle, AB is tangent to the circle at point B, AC is tangetnt to the circle at point C, and point D lies on the circle. What is the $m \angle BAC$?

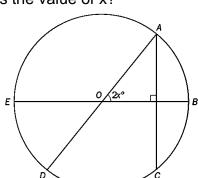




7) The measure of \widehat{CD} is 80° . What is the value of x?



- B. 40
- C. 35
- D. 25



8) The circumference of a table tennis ball is about 40 millimeters. Which expression finds the height of this stack?





- B. 240π
- C. $\frac{120}{\pi}$ D. 120π

- 9) The spokes of a bicycle wheel form 10 congruent central angles. The diameter of the circle formed by the outer edge of the wheel is 18 inches. What is the length, to the nearest tenth inch, of the outer edge of the wheel between two consecutive spokes?
- 9) _____



- A. 1.8 inches
- B. 5.7 inches
- C. 11.3 inches
- D. 25.4 inches