

Pre-Calculus B  
Chapter 6 Content Quiz 1 Practice  
Non-Calculator

Name \_\_\_\_\_

Sketch the angle in standard position.

1.  $950^\circ$

2.  $\frac{-23\pi}{5}$

Convert the angle in degrees to radians. Express your answer as a multiple of  $\pi$ .

3.  $300^\circ$

Convert the angle in radians to degrees.

4.  $\frac{9\pi}{10}$

For #5-7, find the missing quantity of the following arc length problems in which  $s$  denotes the length of the arc of a circle of radius  $r$  subtended by the central angle  $\theta$ . Use the formula  $s = r \theta$

5.  $r = 6$  meters,  $\theta = \frac{2}{3}$  radian,  $s = ?$

6.  $\theta = \frac{1}{6}$  radian,  $s = 3$  feet,  $r = ?$

7.  $r = 2$  miles,  $s = 5$  miles,  $\theta = ?$

For #8-10, find the missing quantity for the following sector problems in which  $A$  denotes the area of the sector of a circle of radius  $r$  formed by the central angle  $\theta$ . Use the formula  $A = \frac{1}{2} r^2 \theta$

8.  $r = 18$  inches,  $\theta = \frac{1}{3}$  radian,  $A = ?$

9.  $\theta = \frac{1}{5}$  radian,  $A = 8$  square feet,  $r = ?$

10.  $r = 6$  miles,  $A = 16$  square miles,  $\theta = ?$