

1. Convert each degree measure into radians and each radian measure into degrees.

a. 75°

b. $-\frac{5\pi}{8}$

c. 600°

d. $\frac{8\pi}{3}$

2. Given the measurement of a central angle and a radius, determine the length of the arc intercepted by the given angle. Round answers to the nearest hundredth.

$x = \frac{2\pi}{3}$ and $r = 12$ in

3. Given the measurement of a central angle and a diameter, determine the area of the sector formed by the given angle. Round answers to the nearest hundredth.

$\theta = 85^\circ$ and $d = 11$ in

4. For each of the following, draw a diagram and show the approximate location for **ALL** angles that meet the criterion. Round answers to the nearest hundredth.

a. $\cos \theta = -0.8391$

b. $\sin \theta = .4932$

c. $\cos \theta = .4132$

d. $\tan \theta = -.325$

e. $\sec \theta = -5$

f. $\csc \theta = 2.5$

