

Find all trig values of θ if $\sin\theta = -\frac{3}{5}$
and $\tan\theta < 0$

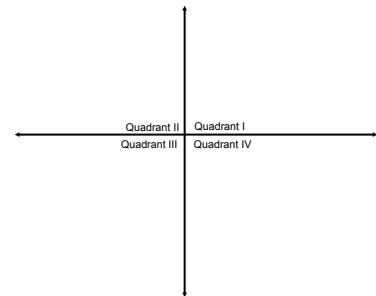
12-3 Evaluating Trig Functions

Objectives:

- I can find all trig ratios given another
- I can find exact values of a trig ratios

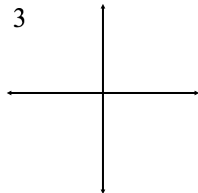
Find all trig values of θ if $\tan\theta = \frac{2}{7}$
and $\sin\theta > 0$

Reference Angles: The acute angle formed by the terminal side and the x-axis.

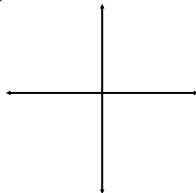


Draw the given angle and state the reference angle.

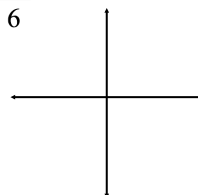
$$\frac{2\pi}{3}$$



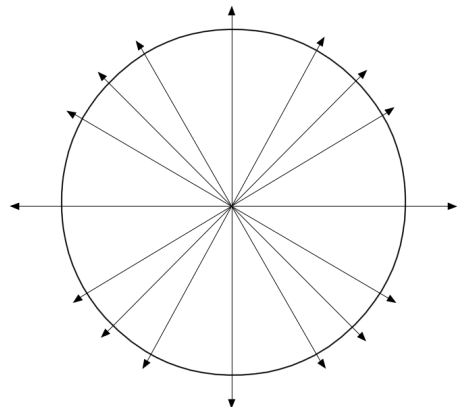
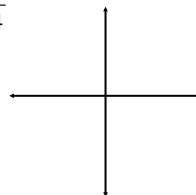
$$\frac{\pi}{6}$$



$$\frac{7\pi}{6}$$



$$-\frac{\pi}{4}$$



12-3

Find the following for each angle:

- a) Quadrant
- b) Reference Angle
- c) Point

$$\frac{5\pi}{3}$$

$$-\frac{5\pi}{4}$$

Find the exact value of the following

$$\sin \pi = \qquad \csc \frac{5\pi}{4} =$$

$$\cos \frac{3\pi}{4} = \qquad \sec \frac{\pi}{6} =$$

$$\tan \frac{11\pi}{6} = \qquad \cot \frac{\pi}{3} =$$

$$\tan\left(-\frac{\pi}{4}\right) \qquad \sec\left(-\frac{3\pi}{2}\right)$$