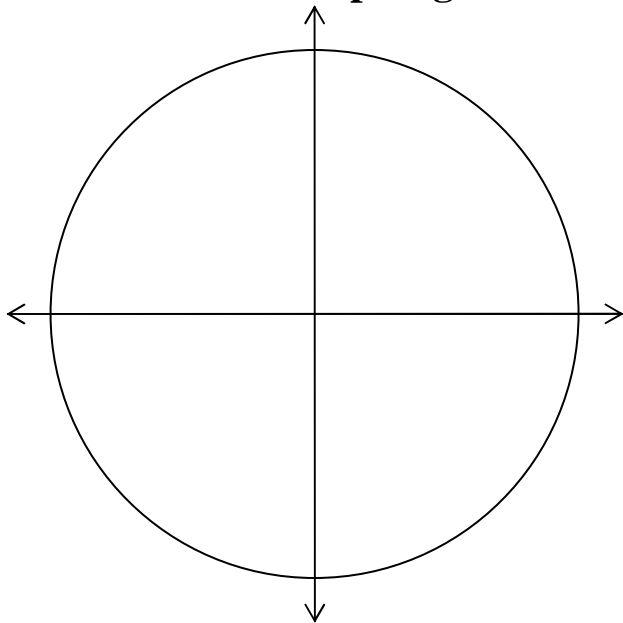


# Worksheet for Graphing the six trigonometric functions



**Label angles in radians:**

$0, \pi/2, \pi, 3\pi/2, 2\pi$ , and angles between  $0$  and  $2\pi$  with a reference angle of  $\pi/4$ .

**Label the points on the unit circle that correspond to the above angles.**

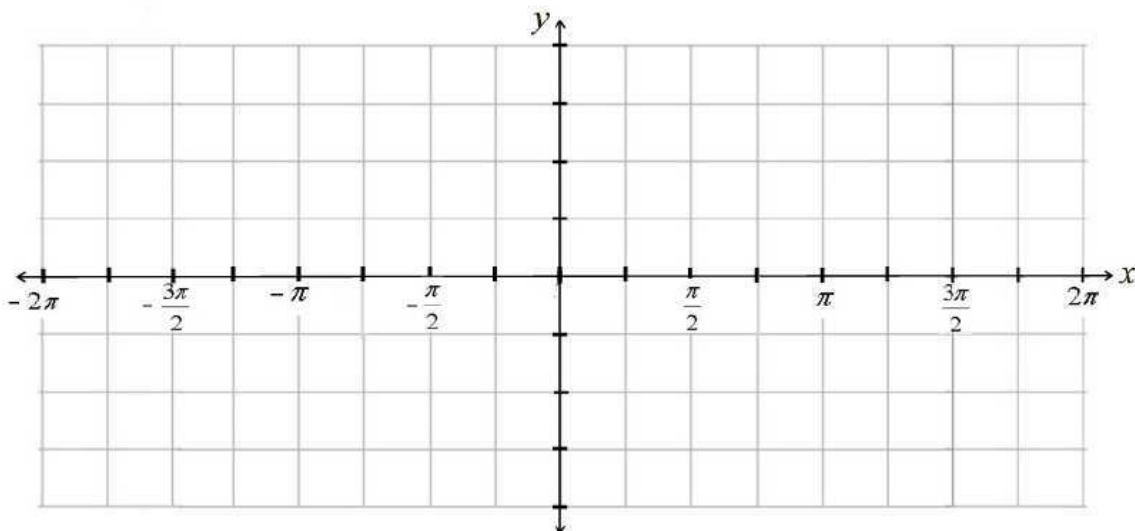
**NOTE:** any point  $(a, b) = (\cos \theta, \sin \theta)$

**Fill in the following table, with values rounded to the nearest tenth:**

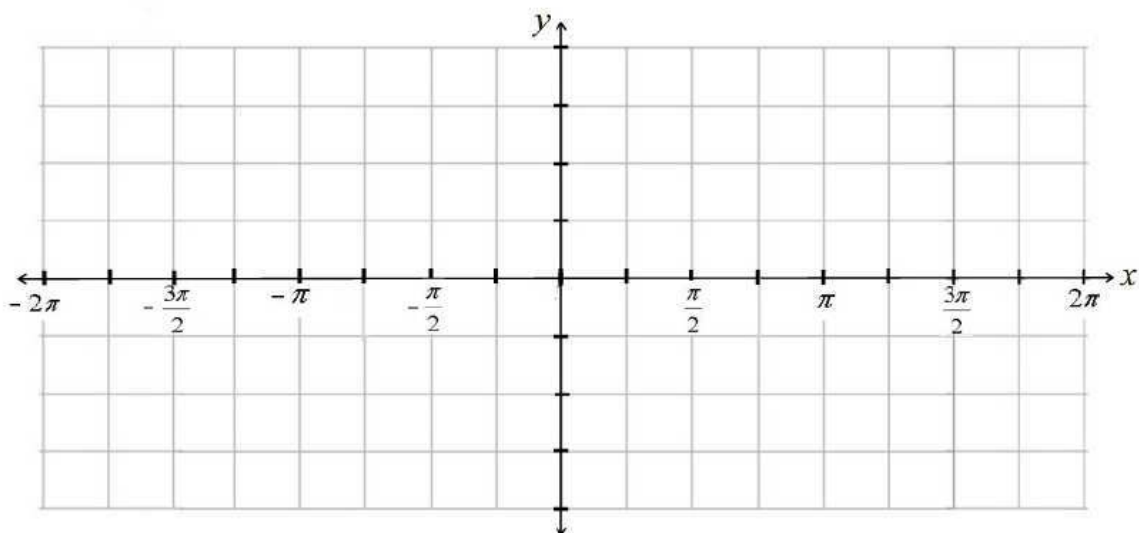
$\theta$	$\sin \theta$	$\csc \theta$	$\cos \theta$	$\sec \theta$	$\tan \theta$	$\cot \theta$
$0$						
$\pi/4$						
$\pi/2$						
$3\pi/4$						
$\pi$						
$5\pi/4$						
$3\pi/2$						
$7\pi/4$						
$2\pi$						

**Now graph  $y = \sin \theta$  by plotting the values  $(\theta, \sin \theta)$ .**

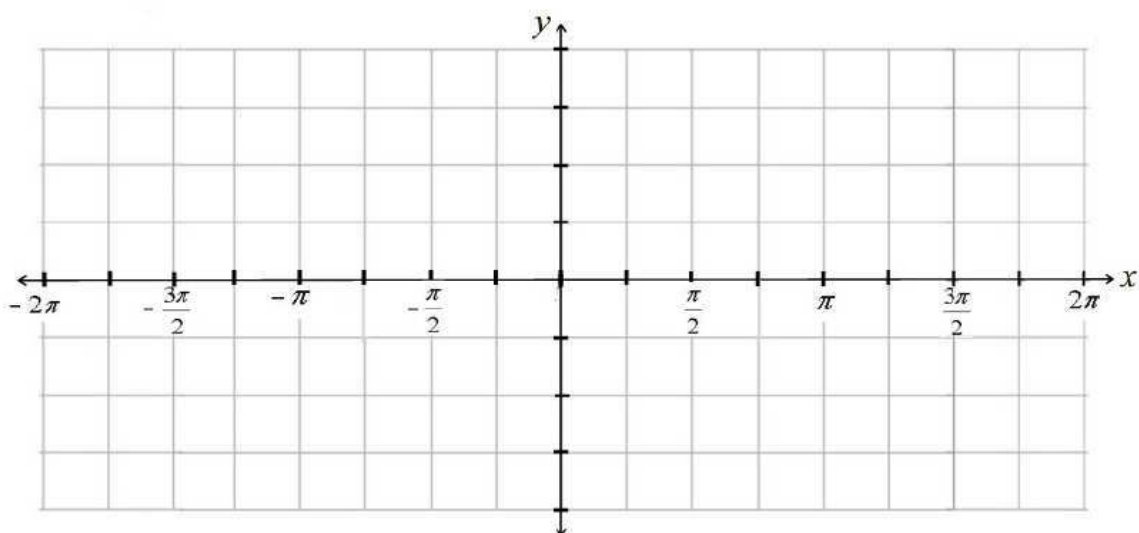
On the next page, graph other functions.



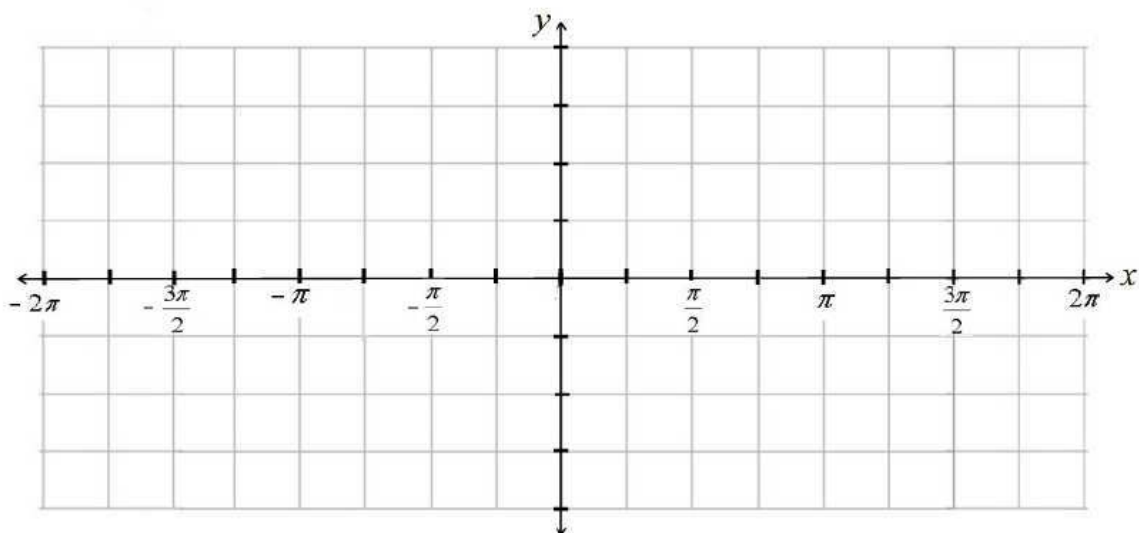
Graph  $y = \csc \theta$  by plotting the values  $(\theta, \csc \theta)$ .



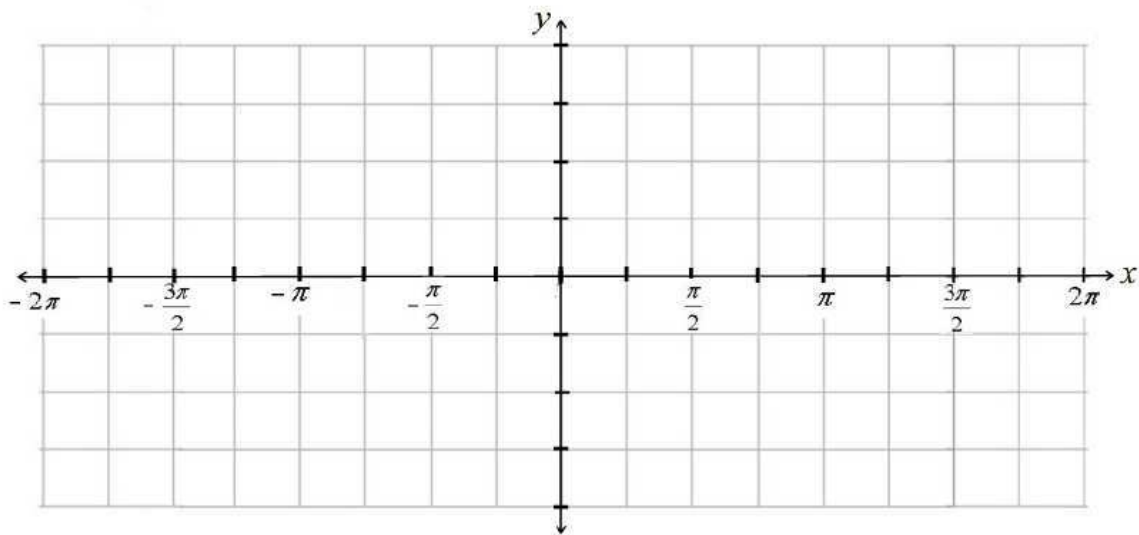
Graph  $y = \cos \theta$  by plotting the values  $(\theta, \cos \theta)$ .



Graph  $y = \sec \theta$  by plotting the values  $(\theta, \sec \theta)$ .



Graph  $y = \cot \theta$  by plotting the values  $(\theta, \cot \theta)$ .



Graph  $y = \tan \theta$  by plotting the values  $(\theta, \tan \theta)$ .

