

1. Visit these web sites:

a. <http://www.humboldt.edu/~dlj1/PreCalculus/Images/UnitCircle.html>

Use this web site to review the Unit Circle definitions of sine and cosine.

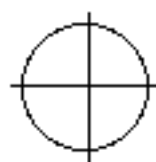
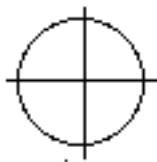
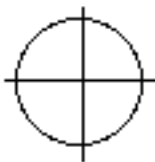
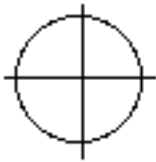
b. <http://www.anlyzemath.com/unitcircle/unitcircle.html>

Scroll down and click on the interactive tutorial to see how the graphs of $y = \sin \theta$, $y = \cos \theta$, and $y = \tan \theta$, are generated.

2. Then answer these questions:

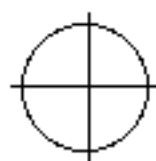
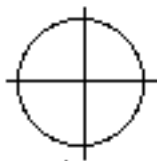
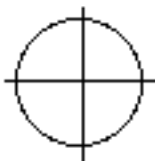
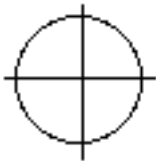
a. Convert these angles from degrees to radians and locate the terminal side on the unit circle.

$$180^\circ = \underline{\hspace{2cm}} \quad 30^\circ = \underline{\hspace{2cm}} \quad 135^\circ = \underline{\hspace{2cm}} \quad 270^\circ = \underline{\hspace{2cm}}$$



b. Convert these angles from radians to degrees and locate the terminal side on the unit circle.

$$\pi/2 = \underline{\hspace{2cm}} \quad \pi/4 = \underline{\hspace{2cm}} \quad 5\pi/6 = \underline{\hspace{2cm}} \quad 7\pi/4 = \underline{\hspace{2cm}}$$



c. Use the Unit Circle to find the value of each trigonometric function, without a calculator or a table. (Leave radicals in the answers)

$$\sin \pi/3 = \underline{\hspace{2cm}} \quad \sin 3\pi/4 = \underline{\hspace{2cm}} \quad \sin 7\pi/6 = \underline{\hspace{2cm}} \quad \sin 3\pi/2 = \underline{\hspace{2cm}}$$

$$\cos \pi/6 = \underline{\hspace{2cm}} \quad \cos 3\pi/4 = \underline{\hspace{2cm}} \quad \cos \pi = \underline{\hspace{2cm}} \quad \cos 5\pi/3 = \underline{\hspace{2cm}}$$

$$\tan \pi/4 = \underline{\hspace{2cm}} \quad \tan 5\pi/6 = \underline{\hspace{2cm}} \quad \tan 5\pi/4 = \underline{\hspace{2cm}} \quad \tan 11\pi/6 = \underline{\hspace{2cm}}$$