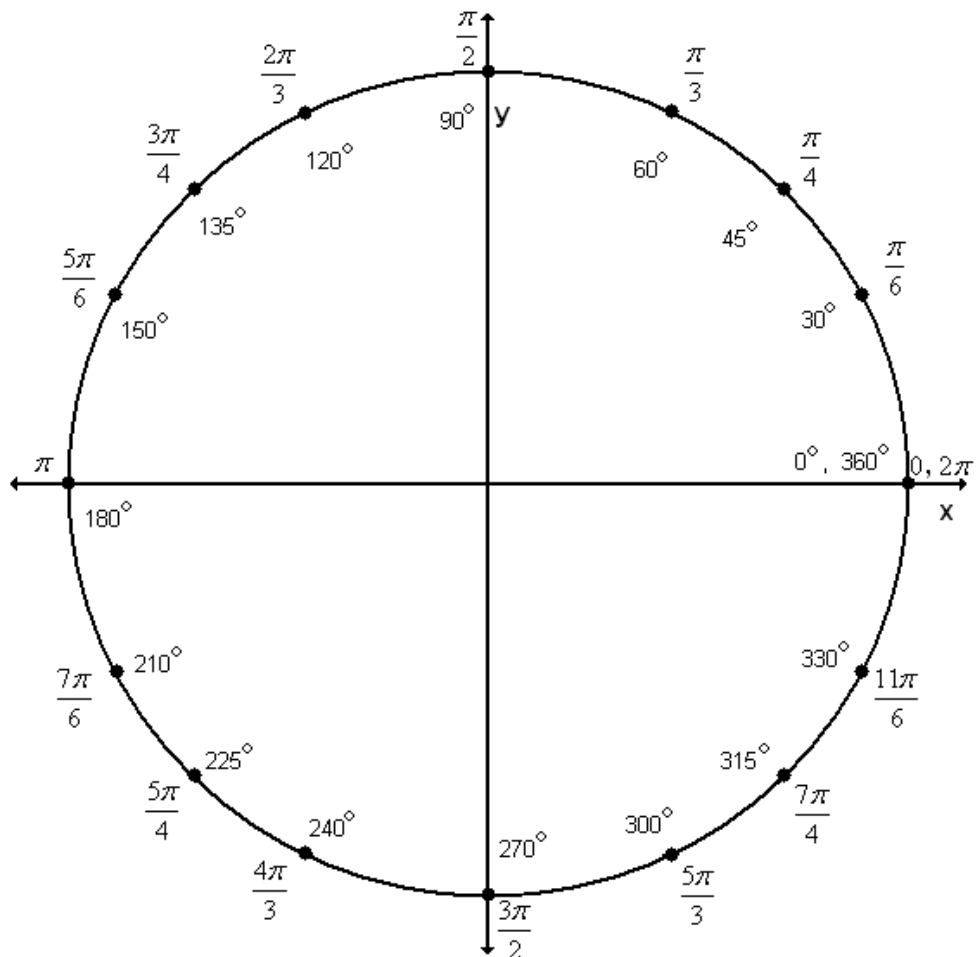


**UNIT 6 WORKSHEET 7  
USING THE UNIT CIRCLE**



Use the unit circle above to find the exact value of each of the following. (Exact value means no decimal approximations.)

A)  $\tan \frac{\pi}{4} =$

B)  $\cos \frac{2\pi}{3} =$

C)  $\cos \pi =$

D)  $\sin \frac{11\pi}{6} =$

E)  $\tan \left( -\frac{2\pi}{3} \right) =$

F)  $\csc \frac{\pi}{3} =$

G)  $\sec \frac{4\pi}{3} =$

H)  $\cos \left( -\frac{11\pi}{6} \right) =$

I)  $\sin \frac{13\pi}{4} =$

$$\mathbf{J)} \quad \csc\left(-\frac{5\pi}{6}\right) =$$

$$\mathbf{K)} \quad \tan\left(-\frac{\pi}{6}\right) =$$

$$\mathbf{L)} \quad \cot\frac{2\pi}{3} =$$

$$\mathbf{M)} \quad \sec\left(-\frac{19\pi}{3}\right) =$$

$$\mathbf{N)} \quad \cot\frac{\pi}{4} =$$

$$\mathbf{O)} \quad \cot\frac{11\pi}{6} =$$

$$\mathbf{P)} \quad \cos\left(-\frac{9\pi}{2}\right) =$$

$$\mathbf{Q)} \quad \sin\frac{21\pi}{4} =$$

$$\mathbf{R)} \quad \cot\frac{7\pi}{4} =$$

$$\mathbf{S)} \quad \sin\left(-\frac{7\pi}{6}\right) =$$

$$\mathbf{T)} \quad \cot\frac{26\pi}{3} =$$

$$\mathbf{U)} \quad \cos\frac{\pi}{3} =$$

V) Find all angles  $\theta$  in the interval  $[0, 2\pi)$  that satisfy the expression:

$$\sin\theta = -\frac{\sqrt{3}}{2} \quad \theta = \underline{\hspace{2cm}}$$

W) Find all angles  $\theta$  in the interval  $[0, 2\pi)$  that satisfy the expression:

$$\csc\theta = \sqrt{2} \quad \theta = \underline{\hspace{2cm}}$$

X) Find all angles  $\theta$  in the interval  $[0, 2\pi)$  that satisfy the expression:

$$\tan\theta = \sqrt{3} \quad \theta = \underline{\hspace{2cm}}$$

Y) Find all angles  $\theta$  in the interval  $[0, 2\pi)$  that satisfy the expression:

$$\sec\theta = \text{undefined} \quad \theta = \underline{\hspace{2cm}}$$