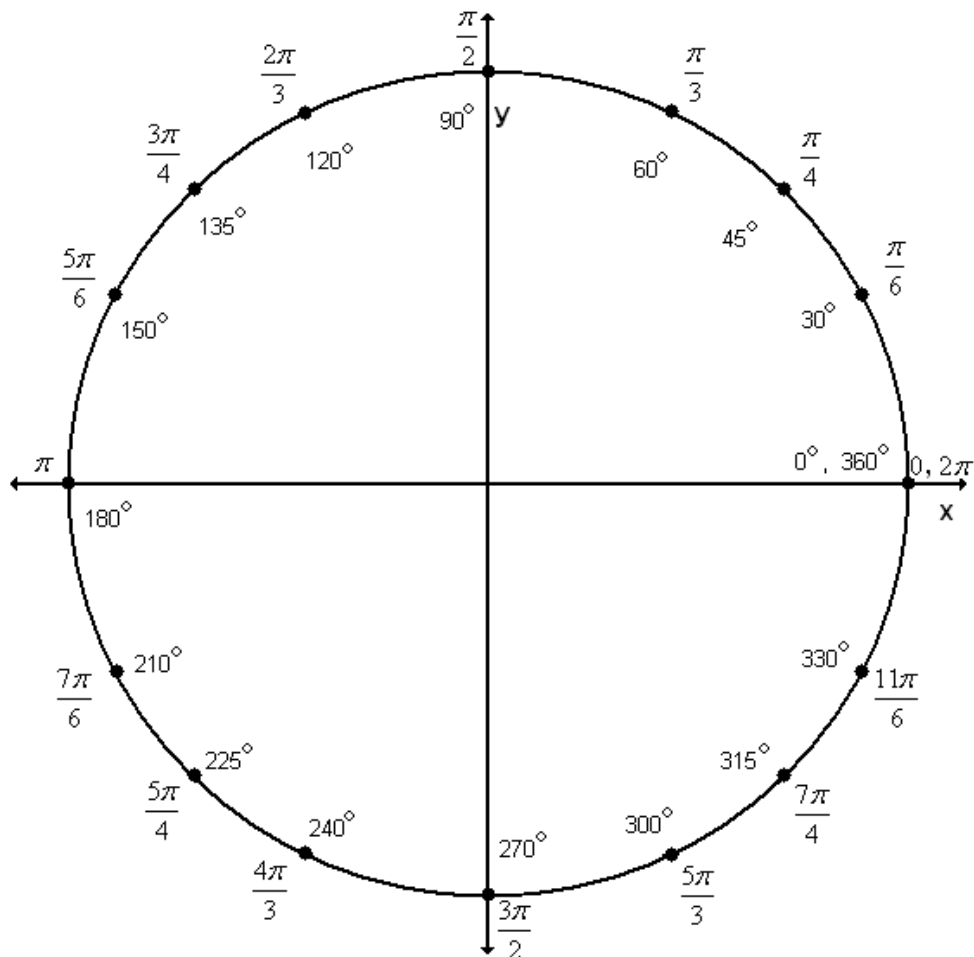


**UNIT 6 WORKSHEET 9
USING THE UNIT CIRCLE**



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

A) $\sin \frac{3\pi}{2} =$

B) $\csc \frac{7\pi}{4} =$

C) $\tan \frac{\pi}{3} =$

D) $\sec \left(-\frac{5\pi}{6} \right) =$

E) $\cot \left(-\frac{11\pi}{6} \right) =$

F) $\cos \left(-\frac{\pi}{3} \right) =$

G) $\csc \frac{26\pi}{3} =$

H) $\tan \left(-\frac{10\pi}{3} \right) =$

I) $\sec \frac{19\pi}{4} =$

J) $\cos(-225^\circ) =$

K) $\cos 0 =$

L) $\sec(-780^\circ) =$

M) $\csc \frac{2\pi}{3} =$

N) $\cot \frac{4\pi}{3} =$

O) $\sin(-480^\circ) =$

P) $\cos\left(-\frac{13\pi}{4}\right) =$

Q) $\sin \frac{47\pi}{6} =$

R) $\sec 900^\circ =$

S) $\cot \frac{13\pi}{2} =$

T) $\tan\left(-\frac{11\pi}{3}\right) =$

U) $\sin \frac{25\pi}{6} =$

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

$$\sin \theta = -\frac{1}{2} \quad \theta = \underline{\hspace{2cm}}$$

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

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

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

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

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

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