Unit Circle Worksheet A

Name_____

Period_____

Solve the following problems using your Unit Circle.

1) $\sin(90^\circ) =$

2) $\cos\left(\frac{\pi}{4}\right) =$

3) $\sin\left(\frac{5\pi}{4}\right) =$

4) $\cos\ 135^\circ\ =$

5) $\tan\left(\frac{5\pi}{4}\right) =$

6) $\tan(180^\circ) =$

7) $\sin\left(\frac{-\pi}{4}\right) =$

8) $\cos\ -90^\circ\ =$

Unit Circle Worksheet B

Name_____

Period_____

Solve the following problems using your Unit Circle.

1) $\sin(150^\circ) =$

2) $\cos\left(\frac{7\pi}{6}\right) =$

3) $\sin\left(\frac{5\pi}{6}\right) =$

4) $\cos\ -135^\circ\ =$

5) $\tan\left(\frac{9\pi}{6}\right) =$

6) $\tan(135^\circ) =$

7) $\sin\left(\frac{-\pi}{3}\right) =$

8) $\cos\ -120^\circ\ =$

Unit Circle Worksheet C

Name_____

Period_____

The given point P is located on the Unit Circle. State the quadrant and find the angle θ, also $\sin\theta$, $\cos\theta$ and $\tan\theta$.

1) $P\left(-\frac{1}{2},\frac{\sqrt{3}}{2}\right)$

Quad:

$\sin\theta$:

$\cos\theta$:

$\tan\theta$:

2) $P(0,-1)$

Quad:

$\sin\theta$:

$\cos\theta$:

$\tan\theta$:

3) $P\left(\frac{-\sqrt{2}}{2},\frac{-\sqrt{2}}{2}\right)$

Quad:

$\sin\theta$:

$\cos\theta$:

$\tan\theta$:

Find the exact value of each function.

4) $\cos\left(\frac{7\pi}{4}\right)$

5) $\sin\ -30^\circ$

6) $\sin\left(-\frac{2\pi}{3}\right)$

7) $\cos(600^\circ)$

8) $\sin\left(\frac{9\pi}{2}\right)$

9) $\tan(7\pi)$

10) $\cos\left(-\frac{11\pi}{4}\right)$

11) $\sin\ -225^\circ$

12) $\tan(585^\circ)$

13) $\cos(1440^\circ)$

14) $\sin\left(-\frac{13\pi}{4}\right)$

15) $\cos\left(\frac{23\pi}{6}\right)$