Secondary Math 3 Name_____ ID: 1

6-2 Assignment

Date_____ Period____

Solve each equation for $0 \le \theta < 2\pi$. Round your answers to the nearest hundredth.

1) $\tan \theta = -8.46$

2) $-\frac{\sqrt{2}}{2} = \sin \theta$

3) $\tan \theta = 1$

4) $\cos \theta = 0$

5) $-0.24 = \sin \theta$

6) $0.89 = \cos \theta$

7) $-4 + \cos \theta = -10.67$

8) $-2\sin \theta = -1.3$

9) $\frac{1}{4} \cdot \cos \theta = -0.175$

10) $-27.66 = 3\tan \theta$

11) $-1.76 = -2 + 3\cos \theta$

12) $5 - 4\sin \theta = 1$

13) $5.084 = 5 - \frac{1}{5} \cdot \cos \theta$

14) $-1.64 = 1 + 3\sin \theta$

15) The water level of a harbor can be modeled by the equation $f(t) = -30\cos\left(\frac{6\pi}{37}t\right)$, where t represents the hours after low tide and f is the water depth in feet. Determine how many hours after low tide the water level is at 15 feet during the day

16) The intensity of a sound wave for a certain pitch fork can be modeled by the function $f(t) = 0.001\sin(1320\pi t)$, where t is measured in seconds. When does the intensity first reach -0.0006 ?