

## Worksheet 16 - Lesson 47

Date \_\_\_\_\_ Period \_\_\_\_\_

**Using degrees, find the amplitude and period of each function. Then graph.**

1)  $y = \frac{1}{2} \cdot \cos \theta - 1$

2)  $y = 3\sin \theta + 2$

**Using radians, find the amplitude and period of each function. Then graph.**

3)  $y = \frac{1}{2} \cdot \sin \theta - 1$

4)  $y = \cos \theta - 1$

5)  $y = \cos \theta + 1$

6)  $y = 4\cos \theta + 1$

7) Evaluate. Do not use a calculator.

$$\tan^{-1}\left(\tan \frac{7\pi}{4}\right)$$

8) Evaluate. Do not use a calculator.

$$\tan^{-1}\left(\tan \frac{5\pi}{6}\right)$$

9) Evaluate. Do not use a calculator.

$$\tan^{-1}\left(\tan \frac{4\pi}{3}\right)$$

10) Evaluate. Do not use a calculator.

$$\tan^{-1}(\tan -\pi)$$

11) Evaluate. Do not use a calculator.

$$\sin \tan^{-1} \frac{5}{4}$$

12) Evaluate. Do not use a calculator.

$$\cos \tan^{-1} \frac{3}{5}$$