

Name \_\_\_\_\_

Date \_\_\_\_\_

Advanced Algebra

Unit 10: Assignment #14 Graphing Trig Functions

Make a table and graph the following:

- Make sure your calculator is in degree Mode
- Use your calculator to find the value of the following
- You might have to extend the given table to find the period
- Make a Graph. Degrees will go on the x axis.

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

$\theta$	Value
0	
90	
180	
270	
360	

2)  $y = \sin(\theta - 180)$

$\theta$	Value
0	
90	
180	
270	
360	

3)  $y = 3 + 2\sin(\theta + 180)$

$\theta$	Value
0	
90	
180	
270	
360	

$$4) y = \frac{1}{2}\cos\theta$$

$\theta$	Value
0	
90	
180	
270	
360	

$$5) y = 3+4\cos(\theta - 90)$$

$\theta$	Value
0	
90	
180	
270	
360	

$$6) y = \tan \theta \text{ Hint: } \tan = \frac{\sin}{\cos} \text{ This graph has asymptotes}$$

$\theta$	Value
0	
90	
180	
270	
360	

$$7) y = \sin\theta + 1$$

$\theta$	Value
0	
90	
180	
270	
360	

$$8) y = \cos\theta - 2$$

$\theta$	Value
0	
90	
180	
270	
360	

9)  $y = -3\cos\theta$

$\theta$	Value
0	
90	
180	
270	
360	

10)  $y = 2\cos\theta + 1$

$\theta$	Value
0	
90	
180	
270	
360	

11)  $y = \cos(2\theta)$

$\theta$	Value
0	
90	
180	
270	
360	

12)  $y = \sin\left(\frac{\theta}{2}\right) - 1$

$\theta$	Value
0	
90	
180	
270	
360	

13)  $y = -2\sin(3\theta)$

$\theta$	Value
0	
90	
180	
270	
360	

- 1) Graph each problem
- 2) What is the period for each function?

- 3) What is the amplitude for each of the graphs? How can you know the amplitude by looking at the given equation.
- 4) Why are some graphs translated up? How can you tell this translation by looking at the given equation?
- 5) Why are some graphs shifted over? How can you tell what this shift is by looking at each of the given equations.