

## Graphing

## Lecture 19

Graph the following completely. Please either label the axes clearly OR show a table.

1. On one set of axes, please graph the following in different colors.

a)  $y = \sin x$

b)  $y = \sin 2x$

c)  $y = 3 \sin 2x$

d)  $y = 3 \sin 2x + 1$

2. On one set of axes, please graph the following in different colors.

a)  $y = \cos x$

b)  $y = \cos\left(x + \frac{\pi}{2}\right)$

c)  $y = -\cos\left(x + \frac{\pi}{2}\right)$

d)  $y = -\cos\left(x + \frac{\pi}{2}\right) - 2$

## Graphing

## Lecture 20

Graph the following completely. Please either label the axes clearly OR show a table.

1.  $y = \tan\left(\frac{x}{2}\right) + 4$

2.  $y = -\cot(3x - \pi)$

3.  $y = 3 \csc 2x$  (hint – you could do this by looking at last night's homework...)

4.  $y = \frac{1}{2} \csc(x) + \frac{3}{2}$

5.  $y = -2 \cos(3x - 3\pi) + 3$

6. I have a continuous trigonometric graph. It passes through the following points.

$$(\pi, 1), \left(\frac{3\pi}{2}, 3\right), (2\pi, 1), \left(\frac{5\pi}{2}, -1\right), (3\pi, 1),$$

a) What is the period (cycle length) of this graph?

b) From the points listed, does it look like a "regular trig function" has shifted left or right? Which and how much?

c) From the points listed, does it appear that the Amplitude of the "regular trig function" has changed? To what?

d) From the points listed, does it appear that the "regular trig function" has moved up or down?

e) List an equation that could fit the points listed \_\_\_\_\_

Senior Analysis

Name \_\_\_\_\_

Real World Trig

Lecture 21

TBD