

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.

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

- What is the period (cycle length) of this graph?
- From the points listed, does it look like a "regular trig function" has shifted left or right? Which and how much?
- From the points listed, does it appear that the Amplitude of the "regular trig function" has changed? To what?
- From the points listed, does it appear that the "regular trig function" has moved up or down?
- List an equation that could fit the points listed _____

Senior Analysis

Name _____

Real World Trig

Lecture 21

TBD