

## Pre-Calculus

### Unit 4B – October 29 to November 11

Date	Topic	Assignment
Wed 10/29	Application problems	Weather Project
Thurs 10/30	Application problems	Handout
Fri 10/31	Application problems	continued
Mon 11/03	<b>Application Review and take home quiz</b>	
Tues 11/04	Graph Tangent (with transformations)	Worksheet
Wed 11/05	Graph Cotangent (with transformations)	Worksheet
Thurs 11/06	Graph Secant (with transformations)	Worksheet
Fri 11/07	Graph Cosecant (with transformations)	Worksheet
Mon 11/10	Review - Graphing Trig Functions	
Tues 11/11	<b>Test - Graphing Trig Functions</b>	

#### Tuesday, November 4      Graphing Tangent Functions

Find the amplitude, period, phase shift, vertical translation and graph the function.

- 1)  $y = \frac{1}{4} \tan x$       2)  $y = -3 \tan 4x$       3)  $y = \tan \frac{1}{2} x$       4)  $y = \tan \left( x - \frac{\pi}{4} \right)$
- 5)  $y = 2 \tan \frac{1}{4} x$       6)  $y = -\frac{1}{2} \tan x$       7)  $y = \frac{1}{2} \tan \left( \frac{1}{4} x + \frac{\pi}{4} \right)$       8)  $y = 1 + \tan 2x$

#### Wednesday, November 5      Graphing Cotangent Functions

Find the amplitude, period, phase shift, vertical translation and graph the function.

- 1)  $y = \cot \frac{1}{2} x$       2)  $y = 3 \cot x$       3)  $y = \frac{1}{2} \cot \frac{1}{2} x$       4)  $y = 2 \cot \left( x - \frac{\pi}{2} \right)$
- 5)  $y = \frac{1}{4} \cot(x + \pi)$       6)  $y = \cot 2x$       7)  $y = -\cot x$       8)  $y = 1 + \cot x$

**Thursday, November 6      Graphing Secant Functions**

Find the amplitude, period, phase shift, vertical translation and graph the function.

1)  $y = \sec \frac{x}{2}$

2)  $y = -\frac{1}{2} \sec x$

3)  $y = -\sec \pi x$

4)  $y = \sec x - 3$

5)  $y = -2 \sec 4x + 2$

6)  $y = \sec(x + \pi)$

7)  $y = \frac{1}{2} \sec(2x - \pi)$

8)  $y = \sec\left(\frac{\pi x}{2} + \frac{\pi}{2}\right) + 3$

**Friday, November 7      Graphing Cosecant Functions**

Find the amplitude, period, phase shift, vertical translation and graph the function.

1)  $y = \csc 2x$

2)  $y = 3 \csc \frac{1}{2} x$

3)  $y = -\csc 3x$

4)  $y = 2 \csc(x - \pi)$

5)  $y = 2 \csc 3x$

6)  $y = -\csc 2x$

7)  $y = 3 \csc \frac{1}{2} x$

8)  $y = 3 + 2 \csc x$