

**Pre-Calculus**  
**Unit 4A – October 15 to October 28**

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
Wed 10/15	<b>PSAT</b>	
Thurs 10/16	Test Corrections – 1.3	complete Corrections
Fri 10/17	Complete Test Corrections and missing assignments. <b>End of 1<sup>st</sup> Term</b>	
Mon 10/20	4.5 Graphing Sine Function (with transformations)	Handout
Tues 10/21	4.5 Graphing Sine Function (with transformations)	Worksheet
Wed 10/22	<b>Early Dismissal</b>	
Thurs 10/23	4.5 Graphing Cosine Function (with transformations)	Handout
Fri 10/24	4.5 Graphing Cosine Function (with transformations)	Worksheet
Mon 10/27	Review	
Tues 10/28	<b>Test 2.1 - Graphing Sine and Cosine</b>	

**Tuesday, October 21**

Graphing Sine Functions

Without graphing, state the domain, range, amplitude, vertical shift, and phase shift for each function.

$$1) y = 3\sin(\theta - \pi) + 4 \quad 2) y = -2\sin\left(\theta + \frac{\pi}{2}\right) - 6 \quad 3) y = \frac{1}{2}\sin\theta - 4$$

$$4) y = \sin\left(\theta - \frac{\pi}{3}\right) \quad 5) y = -5\sin(\theta - \pi) - 8 \quad 6) y = -3\sin\theta - 5$$

Graph each of the following. Identify the amplitude, phase shift, vertical shift, and range.

$$7) y = \sin\left(\frac{1}{2}\theta\right) + 3 \quad 8) y = -\sin(3\theta) \quad 9) y = -2\sin\theta$$

$$10) y = -3\sin\left(\frac{1}{2}\theta\right) + 1 \quad 11) y = \sin 2(\theta - \pi) \quad 12) y = 2\sin\left(\theta - \frac{\pi}{2}\right) - 1$$

**Friday, October 24**

Graphing Cosine Functions

Find the domain, range, amplitude, vertical shift, and phase shift for each function.

1)  $y = 5 \cos(\theta - \pi) + 4$

2)  $y = \cos(\theta + 2\pi) - 3$

3)  $y = -8 \cos \theta - 4$

4)  $y = \frac{1}{2} \cos(\theta - 4\pi) + 3$

Graph each of the following. Identify the amplitude, phase shift, vertical shift, and range.

5)  $y = \cos\left(\theta + \frac{\pi}{3}\right) + 1$

6)  $y = 2 \cos(\theta + \pi) + 2$

7)  $y = -3 \cos\left(\theta + \frac{\pi}{2}\right)$

8)  $y = -\frac{1}{2} \cos\left(\theta + \frac{\pi}{6}\right) - 3$

9)  $y = \cos\left(\theta + \frac{\pi}{2}\right) - 1$

10)  $y = -2 \cos\left(\theta + \frac{3\pi}{2}\right) + \frac{1}{2}$