

Pre-Calculus

Unit 2 – September 15 to September 23

Date	Topic	Assignment
Thurs 9/15	4.5 Graphing Sine Function (with transformations)	Handout
Fri 10/16	4.5 Graphing Sine Function (with transformations)	Worksheet
Mon 10/19	4.5 Graphing Sine/Cosine Function (with transformations)	Handout
Tues 10/20	4.5 Graphing Cosine Function (with transformations)	Worksheet
Wed 10/21	4.5 Graphing Cosine Function (with transformations)	Worksheet
Thurs 10/22	Test 1.2	
Fri 10/23	Test corrections	

Friday, September 16

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.

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

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

Tuesday, September 20

Graphing Cosine Functions

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

$$1) y = 5 \cos(\theta - \pi) + 4 \quad 2) y = \cos(\theta + 2\pi) - 3$$

$$3) y = -8 \cos \theta - 4 \quad 4) y = \frac{1}{2} \cos(\theta - 4\pi) + 3$$

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

$$5) y = \cos\left(\theta + \frac{\pi}{3}\right) + 1 \quad 6) y = 2 \cos(\theta + \pi) + 2 \quad 7) y = -3 \cos\left(\theta + \frac{\pi}{2}\right)$$

$$8) y = -\frac{1}{2} \cos\left(\theta + \frac{\pi}{6}\right) - 3 \quad 9) y = \cos\left(\theta + \frac{\pi}{2}\right) - 1 \quad 10) y = -2 \cos\left(\theta + \frac{3\pi}{2}\right) + \frac{1}{2}$$