

Sine and Cosine Graphs

Graphs from Yesterday: #1

#2

#3

Amplitude	Eq'n Central Axis	Period Length	Phase Shift
-----------	-------------------	---------------	-------------

#1

#2

#3

MORE TRIG GRAPHS

Graph each of the following sinusoidal functions, and determine the amplitude, the period length, the phase shift, the equation of the central axis and any reflections.

Example #1 $y = 2\sin(2\theta - 90) + 3$

Example #2

$$y = -\cos(3\theta - 45) - 2$$

Graph:

$$-360^\circ \leq \theta \leq 360^\circ$$

Example #3

$$y = -2\cos\left(\frac{1}{2}\theta + 30\right) + 4$$

Understanding Period Length, Phase Shift and Amplitude

Fill in the following table:

FUNCTION	Vertical Shift	Phase Shift	Amplitude	Period Length
$y = 3 \sin \theta$				
$y = 2 \cos \theta - 3$				
$y = 2 \cos(\theta - 60^\circ)$				
$y = \sin(\theta + 45^\circ) - 1$				
$y = -5 \cos 3\theta - 2$				
$y = 4 \sin(-\theta - 30^\circ) - 1$				
$y = \sin(2\theta - 180^\circ) + 3$				
$y = -2 \cos(4\theta - 90^\circ) - 1$				