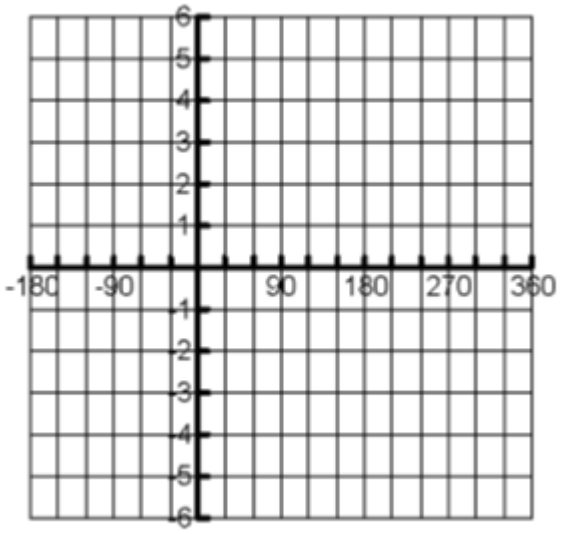
Warm-Up

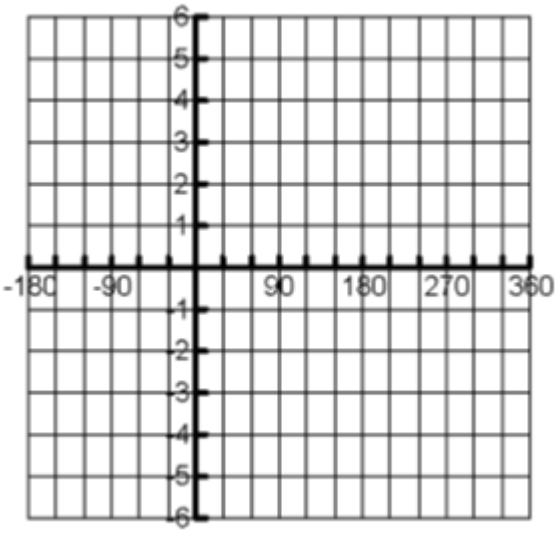
#1
Graph the Base Function
Graph ALL transformation
in the correct order.

$g(x) = 4\cos x - 2$



#2
Graph the Base Function
A table has been created of the key points of the sine curve.
Identify a, k, d and c
Transform these points using the Table
Graph the final curve

$h(x) = 2\sin(3x + 180) + 4$



$f(x) = \sin x$		
(0, 0)		
(90, 1)		
(180, 0)		
(270, -1)		
(360, 0)		

#3
Describe the characteristics of

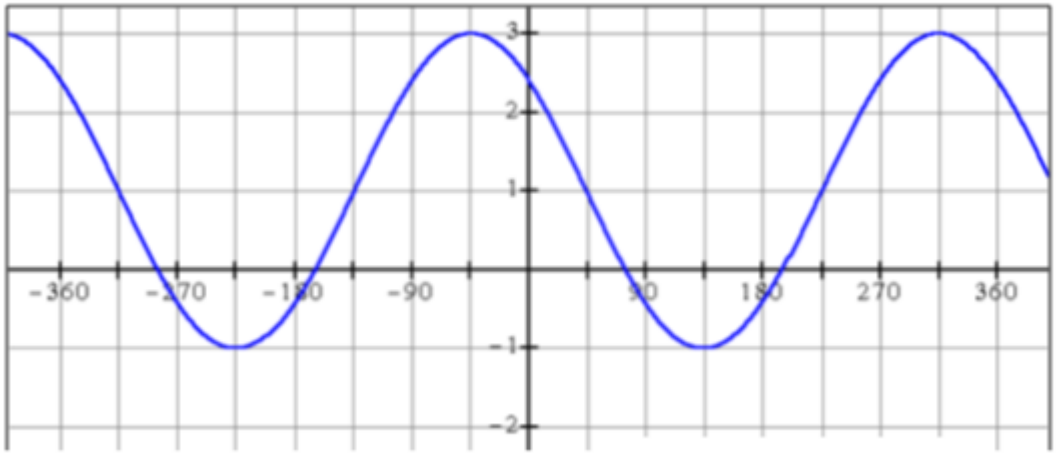
$h(x) = 2\sin(3x + 180) + 4$

The Lesson – Watch the Video

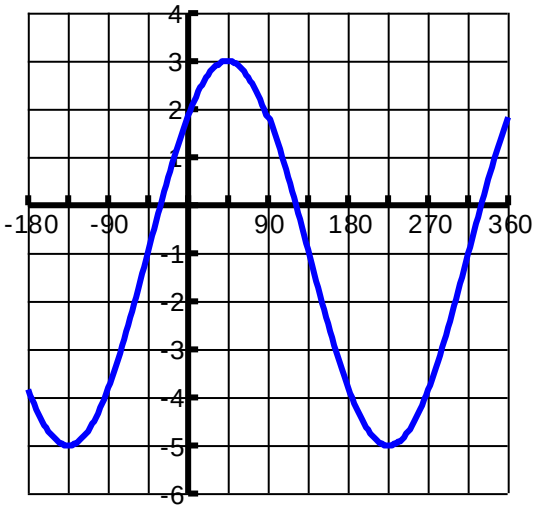
This a systematic approach to come up with the equation of any sinusoidal function.

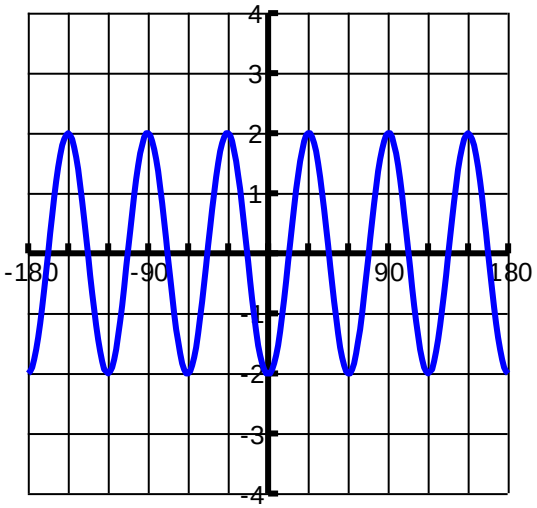
What is the Amplitude ? _____
What is the Period ? _____
What is the Axis of the Curve ? _____

What is the Phase Shift ? _____



Some Examples
Determine the equation of the following sine curves:

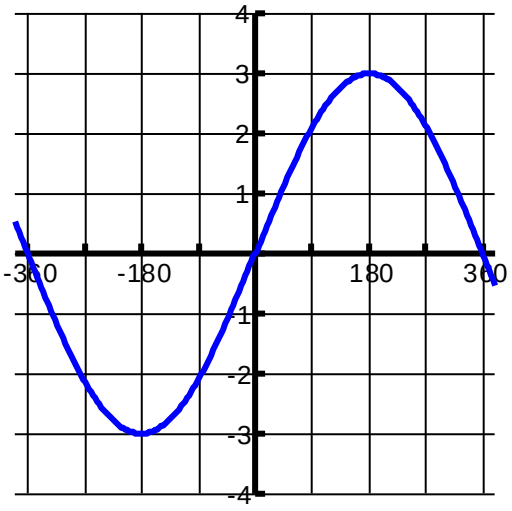


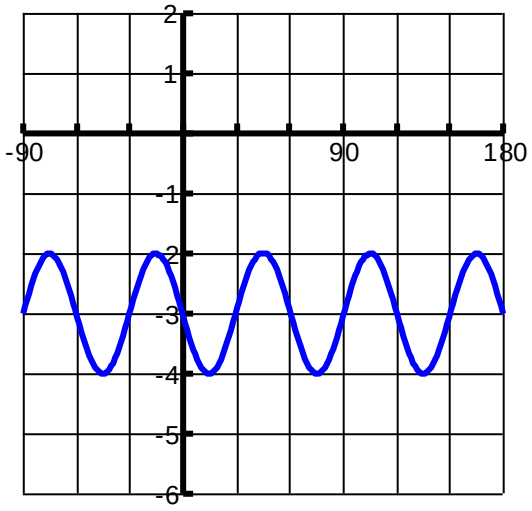


1. Amplitude:
2. Period:
3. Vertical Translation:
4. Phase Shift:
5. Equation:

Amplitude:
Period:
Vertical Translation:
Phase Shift:
Equation:

Try On Your Own #1





1. Amplitude:
2. Period:
3. Vertical Translation:
4. Phase Shift:
5. Equation:

Amplitude:

Period:

Vertical Translation:

Phase Shift:

Equation:

Try On Your Own #2