

**2-1 Graphing Sine and Cosine – Homework #1**

Directions: For #1-6, sketch a graph of the function. Then, state the domain and range.

1.  $f(x) = -\frac{1}{2}\sin(x) + 3$

Period:	S.A.:	Domain:
Increment:	Max:	
Start:	min:	Range:

2.  $y = -2\cos\left(5x - \frac{\pi}{3}\right) + 3$

Period:	S.A.:	Domain:
Increment:	Max:	
Start:	min:	Range:

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

Period:	S.A.:	Domain:  Range:
Increment:	Max:	
Start:	min:	

4.  $y = -3\sin\left(\frac{1}{2}x + \frac{\pi}{3}\right)$

Period:	S.A.:	Domain:  Range:
Increment:	Max:	
Start:	min:	

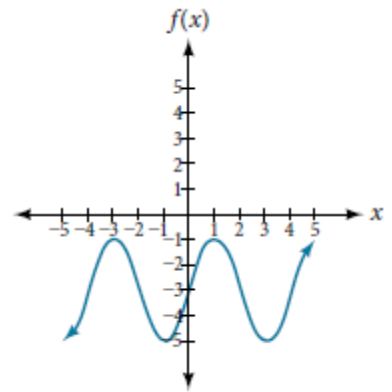
5.  $y = -1 + \sin(2x + \pi)$

Period:	S.A.:	Domain:  Range:
Increment:	Max:	
Start:	min:	

6.  $g(x) = 3\cos\left(\frac{1}{4}x\right)$

Period:	S.A.:	Domain:  Range:
Increment:	Max:	
Start:	min:	

7. Determine the midline and amplitude of the following sine function in the graph to the right.



8. What is the domain and range of the sine function shown in the graph to the right?

