**Homework Set #2.1** Name

*Please do all of your work on a separate sheet of paper.*

*You may use this sheet as an answer sheet if you choose to.*

**I.** *Identify the amplitude, period, phase shift, and vertical shift for each. (4 pts each)*

* 1. $y=2\sin(\left(4x-3\right))+1$
	2. $y=\cos(\left(\frac{3}{4}x\right)-4)$
	3. $y=3\sin(\left(-6x+4\right)+3)$
	4. $y=-4\sin(\left(2πx-\frac{π}{2}\right))-3$
	5. $y=\sin(\left(Bx\right))$

**II.** *Sketch two cycles of each curve (12 pts each)*

* 1. $y=2\cos(x)$
	2. $y=\sin(\left(-2x\right))$
	3. $y=-\sin(\left(x-\frac{π}{2}\right))$
	4. $y=1-\cos(x)$
	5. $y=\sin(\left(3x\right)-2)$
	6. $y=3\sin(\left(2x-\frac{π}{2}\right))$

**III.** *Write an equation for the sine curve given the following information (4pts each)*

* 1. period 2, amplitude 4, reflected over the x-axis

 13. period , amplitude 3, phase shift 2 units right, vertical shift down 4