Section 7.8 Phase Shift and Curve Fitting

Objectives: Graph sinusoidal functions and find a sinusoidal function from data.

To graph functions of the form $y = a\sin b(x-c)+d$ (note: this form has b factored out of the parentheses)

- **Phase shift = c (new starting point) Notice: it is the opposite of the sign in the parentheses.**

Find the amplitude, period, and phase shift of the following equations.

	Amplitude	Period	Phase Shift
1. $y = -3\cos\left(2x+\frac{\pi}{2}\right)$			
2. $y = \frac{1}{5}\sin(2\pi x-4)-1$			
3. $y = -3\sin\left(-2x+\frac{\pi}{2}\right)$			
4. $y = -4\cos\left(-2x+\frac{\pi}{2}\right)$			

Work #1 – 8