Alg 2B Hwk #9 Sec 13-7 Sine only Spring 2018 Name:

1. Write the equation of the Sine Function using the description of the transfomations applied to the parent function.

Transformations: Upside-down, Period $=\frac{2\pi}{7}$, shift $\frac{\pi}{4}$ to the left & 10 units up.

EQ:

2. Find the period, amplitude, phase shift, and equation of the midline for this function:

$y = 11\text{Sin}(12(x - \frac{5\pi}{4}) + 13$

Period: Amplitude: Phase Shift: Eq of Midline:

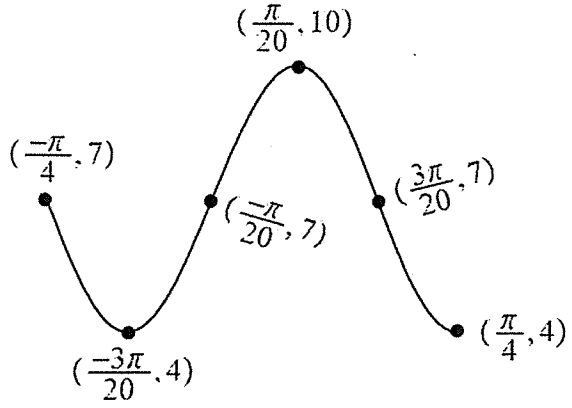
For 3 and 4, graph one period of each function. Label the coordinates of the maximums, minimums, and x-intercepts.

3. $y = -5\text{Sin}(2(x + \frac{\pi}{2})) + 8$

4. $y = 8\text{Sin}(3(x - \frac{\pi}{6})) - 5$

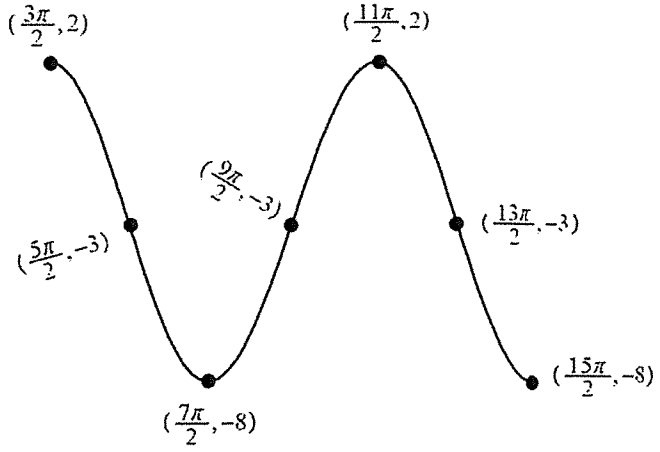
For 5 and 6.Write a Sin equation for each graph.

5.



EQ:

6.



EQ: