Alg 2 Hwk #19 Sec 13-7 Sine Only Spring 2018 Name:

Write the equation of each using the description of the transfomations applied to each parent function.

1. Parent function: $y = \sin x$ Transformations: Upside-down, Period $= \frac{2\pi}{7}$, phase shift $\frac{\pi}{4}$ to the left & 10 units up.

EQ:

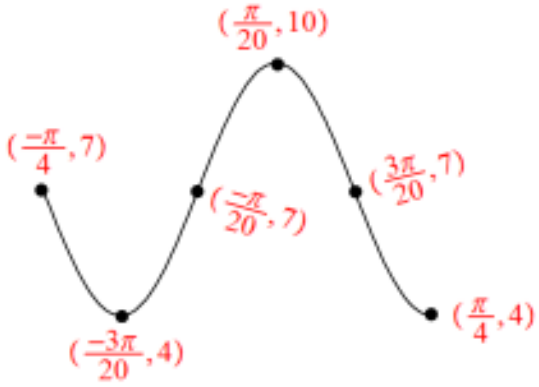
2. Parent function: $y = \sin x$ Transformations: Vertical stretch factor of 4, Period $= 6\pi$, phase shift $\frac{3\pi}{4}$ to the right and 9 units down.

EQ:

3. Graph one period of this function. Label the coordinates of the maximums, minimums, and points on the midline.

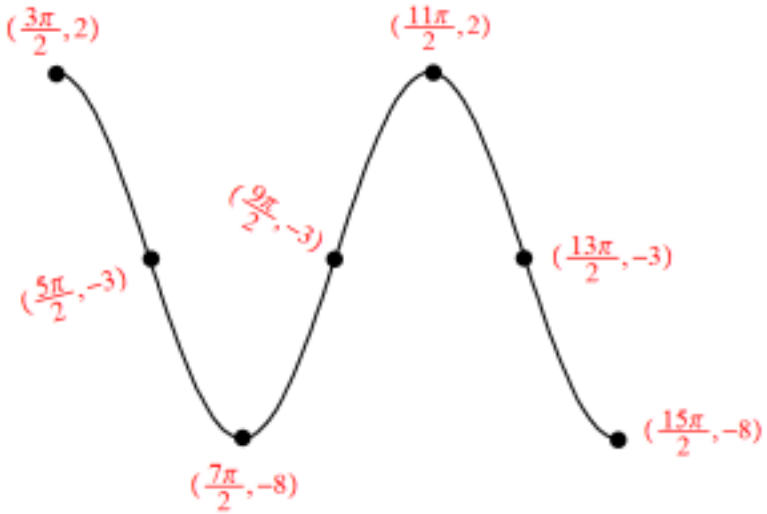
$y = 8\text{Sin}(3(x - \frac{\pi}{6})) - 5$

4. Write a Sine Eq for this graph.



EQ:

5. Write a Sine Eq for this graph.



EQ: