Algebra 2 Bellwork Tuesday, March 24, 2015

Graph one period of each function. Label the coordinates of all maximums, minimums, and x-intercepts.

1. $y = -4\text{Sin}(8(x + \frac{\pi}{2})) - 6$

2. $y = 12\text{Cos}(7(x - \frac{5\pi}{3})) + 8$

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Graph one period of each function. Label the coordinates of all maximums, minimums, and x-intercepts.

1. $y = -4\text{Sin}(8(x + \frac{\pi}{2})) - 6$

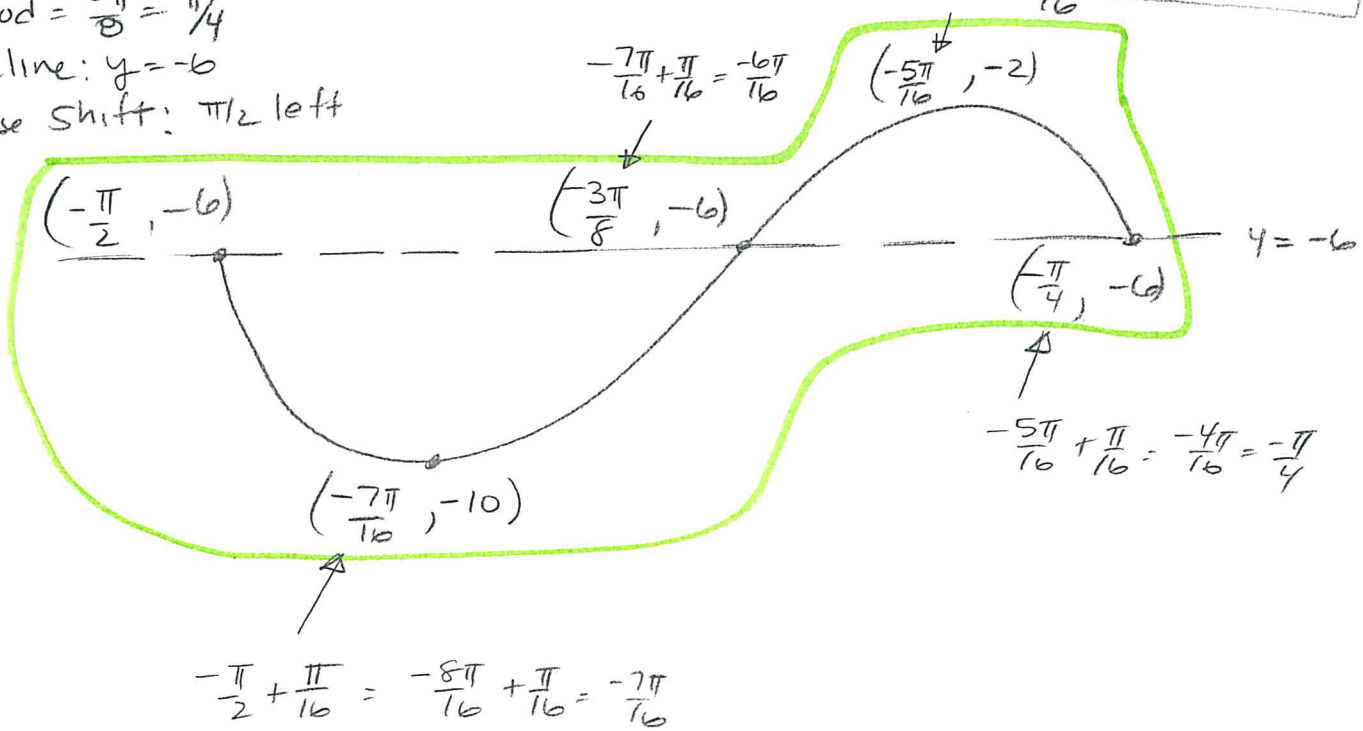
Amp = 4

period = $\frac{2\pi}{8} = \pi/4$

midline: $y = -6$

phase shift: $\pi/2$ left

period = $\frac{\pi}{4}$ → 1/4th of a period = $\frac{\pi}{4} \cdot \frac{1}{4} = \frac{\pi}{16}$




2. $y = 12\text{Cos}(7(x - \frac{5\pi}{3})) + 8$

Amp = 12

Midline $y = 8$

period = $\frac{2\pi}{7}$

phase shift: $\frac{5\pi}{3}$ RIGHT

period = $\frac{2\pi}{7}$ → 1/4th of a period = $\frac{2\pi}{7} \cdot \frac{1}{4} = \frac{\pi}{14}$