

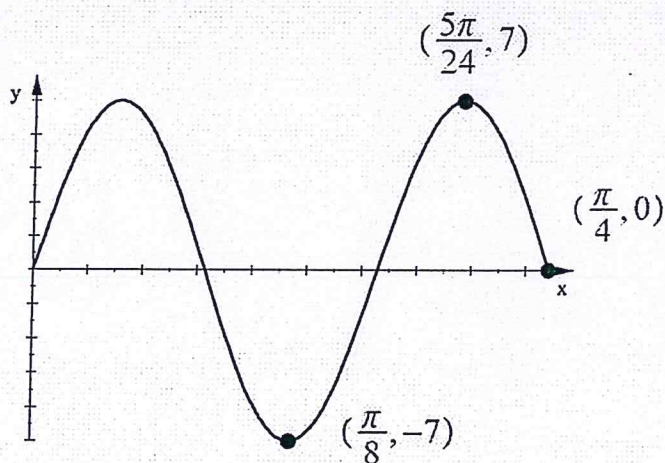
Bellwork Alg 2B Thursday, March 8, 2018

1. Graph one period of this Sine Function.

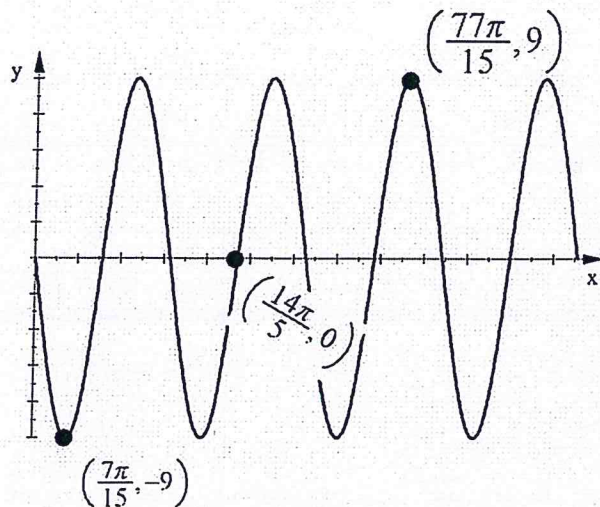
Label the coordinates of all Maximums,

Minimums, and x-intercepts.  $y = -3\sin\left(\frac{3x}{5}\right)$

2. Write the equation of this Sine Function.



3. Write the equation of this Sine Function.



# Bellwork Alg 2B Thursday, March 8, 2018

Answers

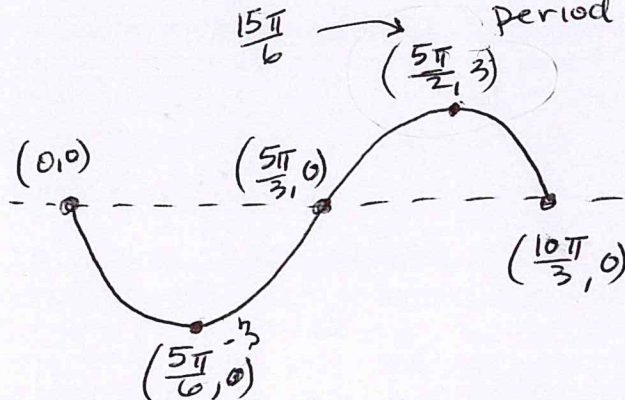
1. Graph one period of this Sine Function.

Label the coordinates of all Maximums, Minimums, and x-intercepts.

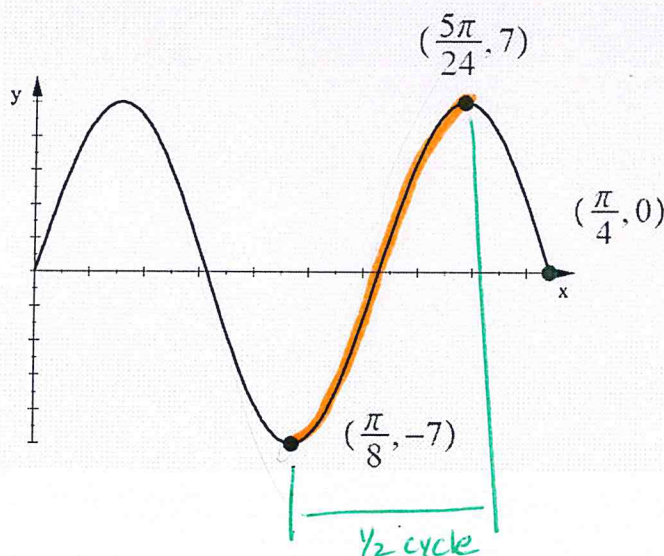
$$y = -3\sin\left(\frac{3x}{5}\right)$$

Amplitude = 3  
upside down

$$\text{period} = \frac{2\pi}{\frac{3}{5}} = 2\pi \cdot \frac{5}{3} = \frac{10\pi}{3}$$



2. Write the equation of this Sine Function.



Amplitude = 7

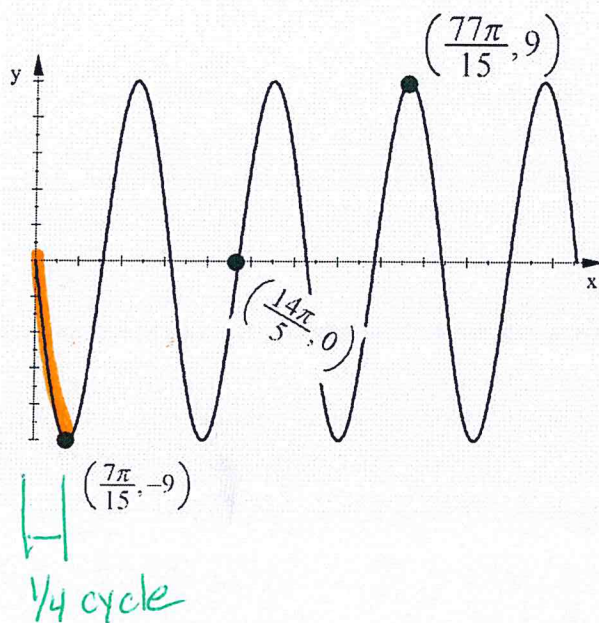
$$a = +7$$

$$\text{period} = \frac{\frac{5\pi}{24} - \frac{\pi}{8}}{\frac{1}{2}} = \left(\frac{5\pi}{24} - \frac{3\pi}{24}\right) 2 = \frac{2\pi}{24} \cdot 2 = \frac{\pi}{6}$$

$$b = \frac{2\pi}{\frac{\pi}{6}} = 2\pi \cdot \frac{6}{\pi} = 12$$

$$y = 7\sin 12x$$

3. Write the equation of this Sine Function.



Amplitude = 9

$$a = -9$$

$$\text{period} = \frac{\frac{7\pi}{15}}{\frac{1}{4}} = \frac{7\pi}{15} \cdot 4 = \frac{28\pi}{15}$$

$$b = \frac{2\pi}{\frac{28\pi}{15}} = 2\pi \cdot \frac{15}{28\pi}$$

$$b = \frac{15}{14}$$

$$y = -9\sin \frac{15x}{14}$$