Algebra 2 Bellwork Monday, March 16, 2015

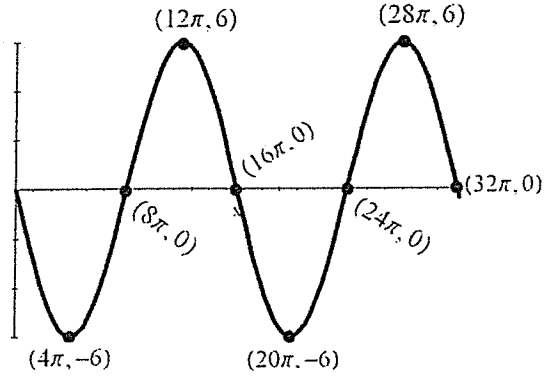
Graph on period of each Sine function. Label the coordinates of all Max, Min, and x-int.

1. $y = 4\text{Sin}11x$

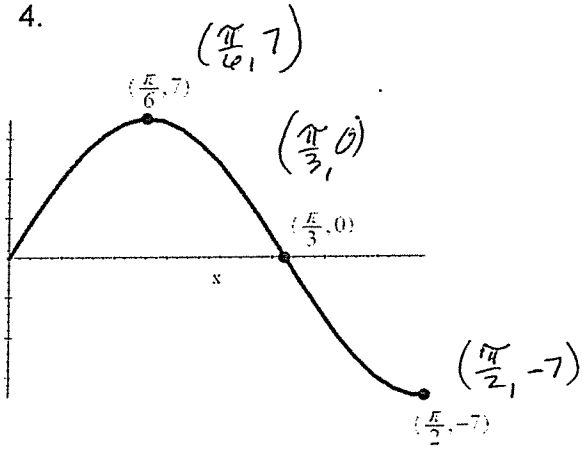
2. $y = -7\text{Sin}\left(\frac{x}{3}\right)$

Write the equation of each Sine function in the form $y = a\text{Sin}bx$

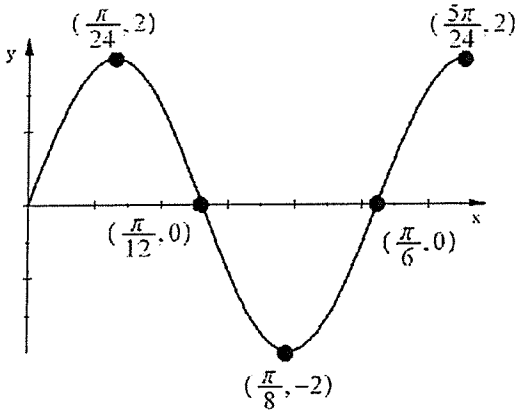
3.



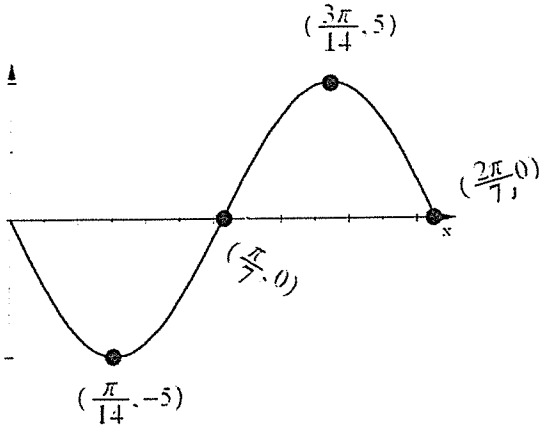
4.



5.



6.

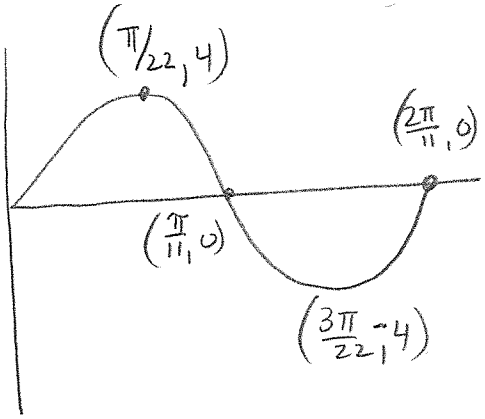


Algebra 2 Bellwork Monday, March 16, 2015 ANSWERS

Graph on period of each Sine function. Label the coordinates of all Max, Min, and x-int.

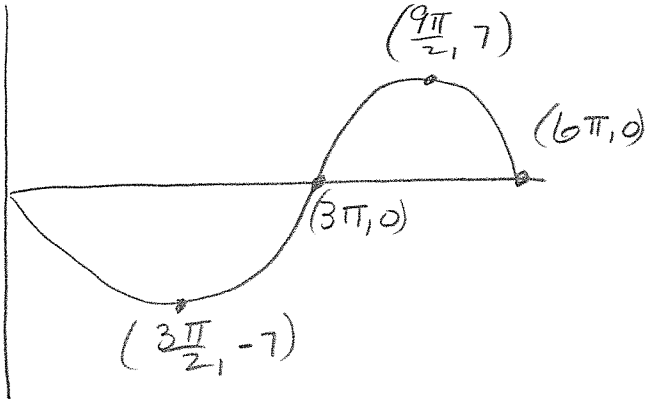
1. $y = 4\text{Sin}11x$

Period $= 2\pi/11$ Amp $= 4$



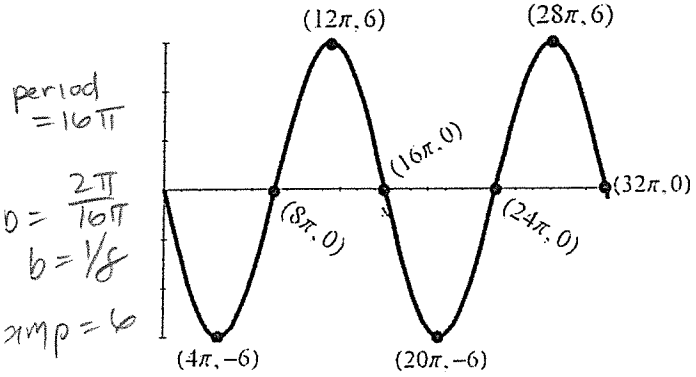
2. $y = -7\text{Sin}\left(\frac{x}{3}\right)$

Period $= \frac{2\pi}{1/3} = 6\pi$ Amp $= 7$



Write the equation of each Sine function in the form $y = a\text{Sin}bx$

3. $y = -6\text{Sin}\frac{x}{8}$



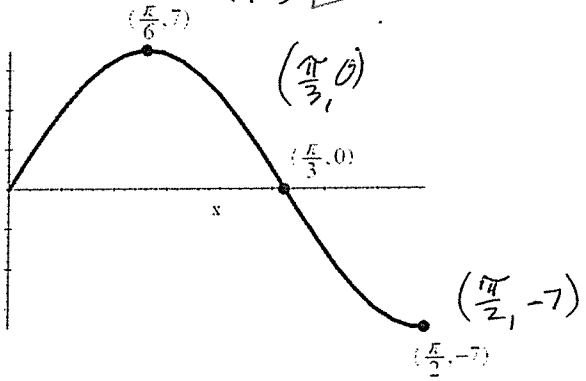
period $= 16\pi$

$b = \frac{2\pi}{16\pi}$

$b = 1/8$

amp $= 6$

4. $y = 7\text{Sin}3x$

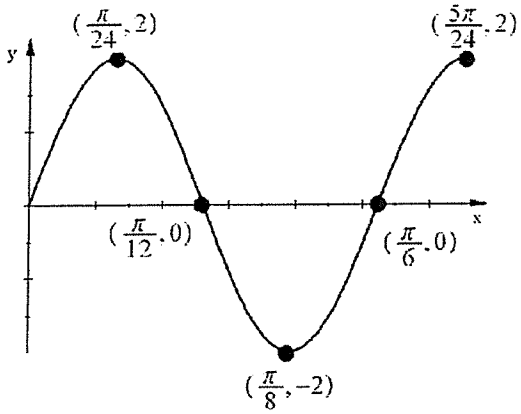


period $= \frac{\pi}{3} \cdot 2 = \frac{2\pi}{3}$

$b = \frac{2\pi}{\frac{2\pi}{3}} = 2\pi \cdot \frac{3}{2\pi} = 3$

amp $= 7$

5. $y = 2\text{Sin}12x$

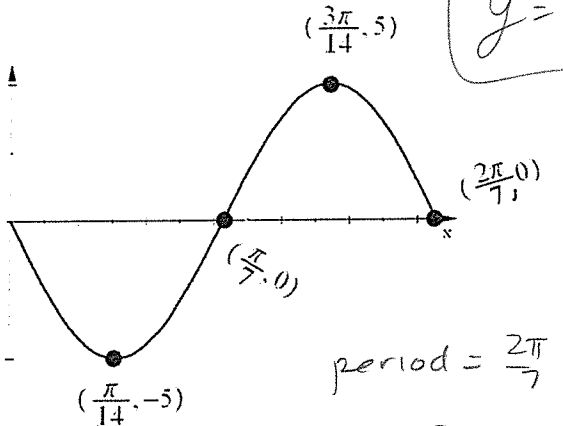


period $= \frac{\pi}{6}$

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

amp $= 2$

6. $y = -5\text{Sin}7x$



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

$b = \frac{2\pi}{\frac{2\pi}{7}} = 2\pi \cdot \frac{7}{2\pi} = 7$

amp $= 5$