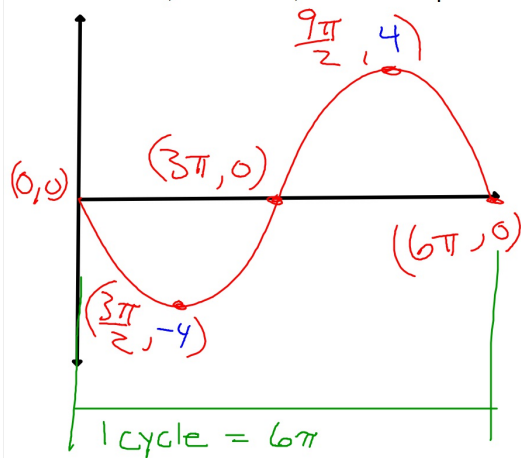


Graph one period of this function. State the coordinates of the all maximums, minimums, and x-intercepts.



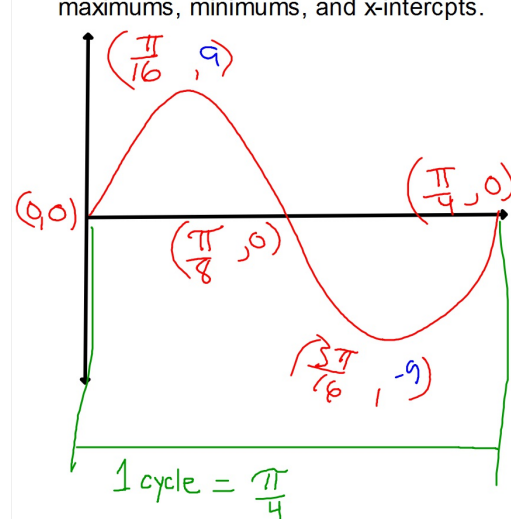
$$y = -4 \sin \frac{x}{3} = -4 \sin \frac{1}{3} x$$

$$\text{period} = \frac{2\pi}{\frac{1}{3}} = 6\pi$$

$$\text{Amplitude} = 4$$

Neg coefficient means graph is upside down.

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

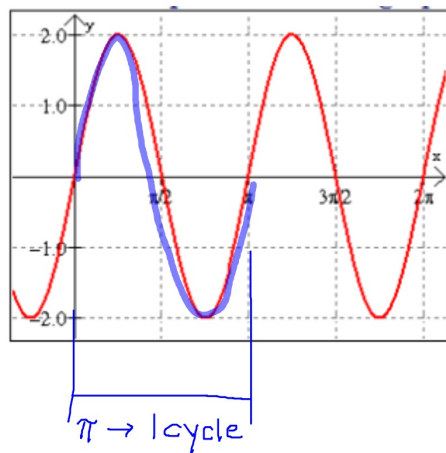


$$y = 9 \sin 8x$$

$$\text{Amp} = 9$$

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

Write the equation of this sine function.



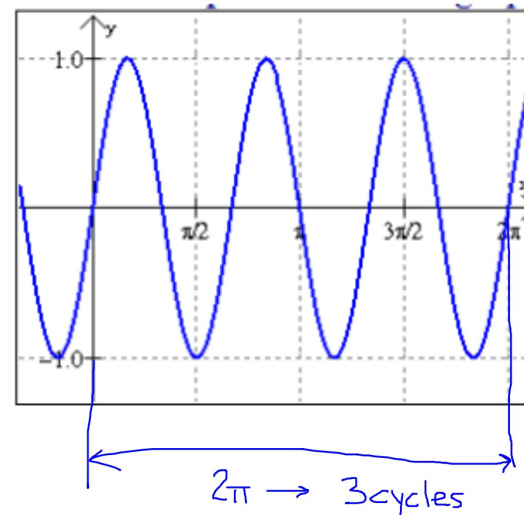
$$\text{Period} = \frac{2\pi}{b} \rightarrow b = \frac{2\pi}{\text{Period}}$$

$$\text{period} = \pi \quad b = \frac{2\pi}{\pi} = 2$$

$$\text{Amplitude} = 2 \rightarrow a = 2$$

$$y = 2 \sin 2x$$

Write the equation of this sine function.



$$y = \sin 3x$$

$$\rightarrow \text{Amp} = 1$$

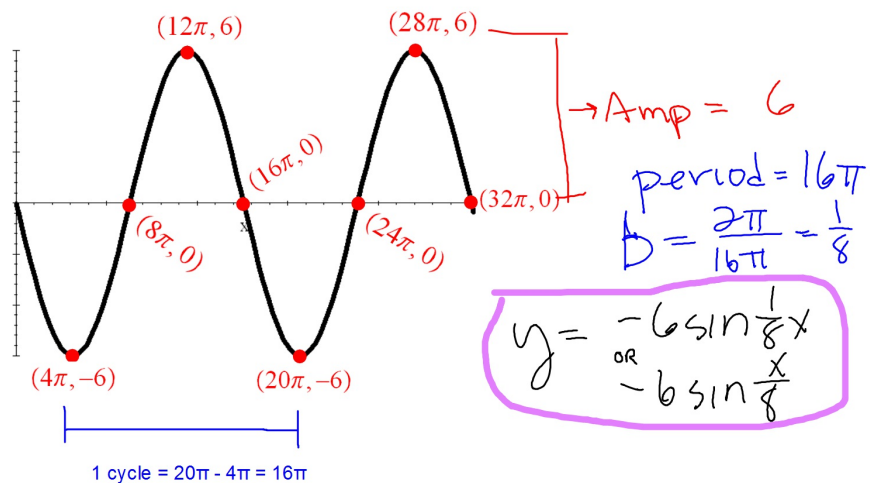
$$\text{period} = \frac{2\pi}{3}$$

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

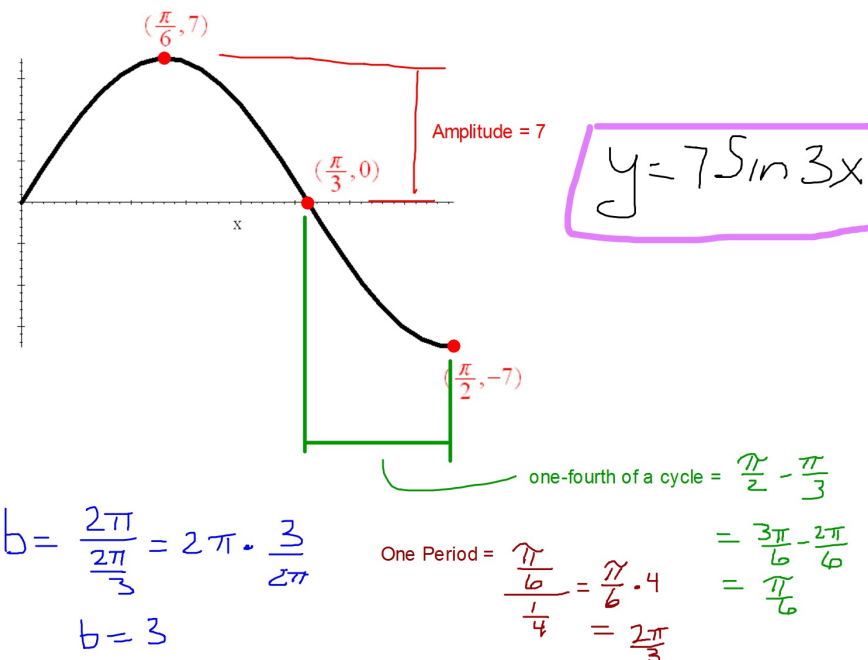
$$\frac{2\pi}{\frac{2\pi}{3}}$$

$$b = 3$$

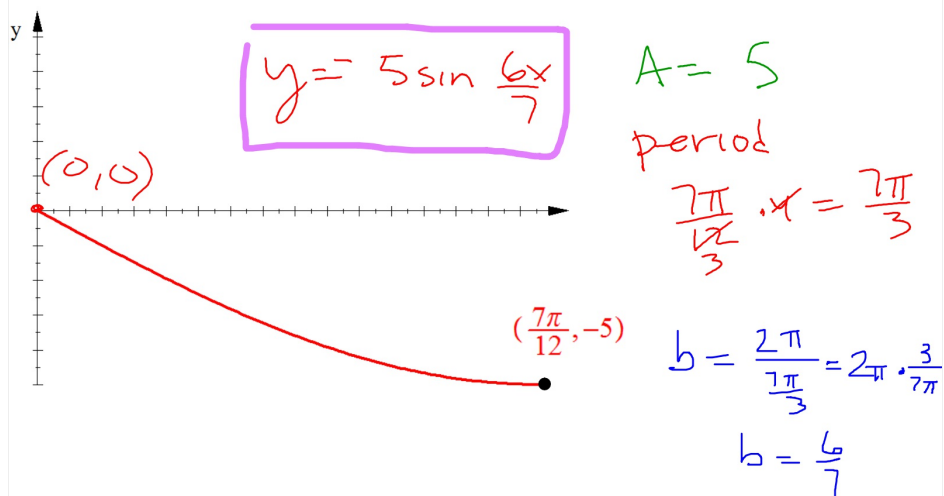
Write the equation of this sine function.



Write the equation of this sine function.



Write the equation of this sine function.



You can now finish Hwk #27

Sec 13-4

Pages 738-739

Due Tomorrow

Problems 13, 14, 22, 23, 27, 29-32, 42

for #'s 22, 23, 27 list the coordinates of all Max's, Min's, and x-int