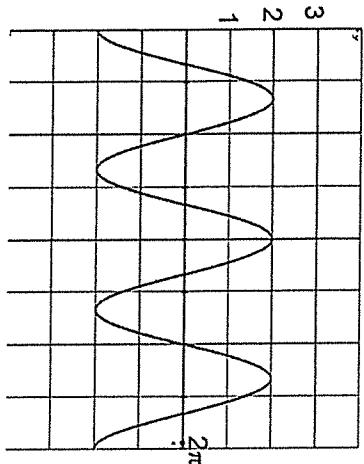
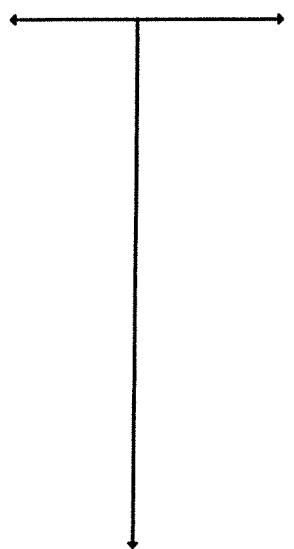


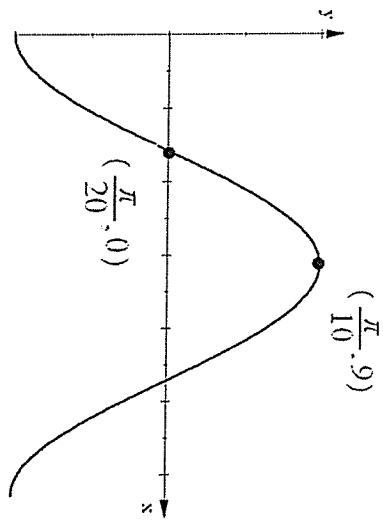
Graph one period of:  $y = 15\cos(2x/9)$   
label the coordinates of all min, max, and x-int.



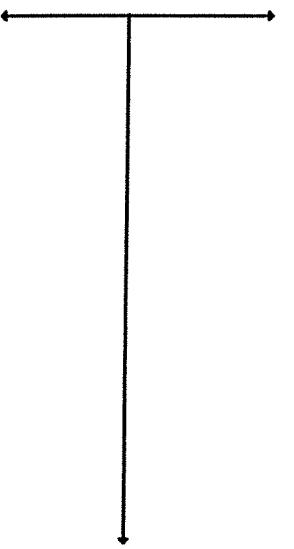
Write the equation of this Cosine Function.



Graph one period of:  $y = -7\cos 23x$   
label the coordinates of all min, max, and x-int.



Write the equation of this Cosine Function:

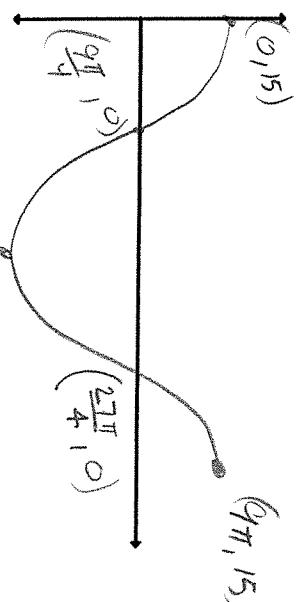
  
 $(\frac{\pi}{10}, 9)$ 

# ANSWERS

Graph one period of:  $y = 15\cos(2x/9)$   
 label the coordinates of all min, max, and x-int.

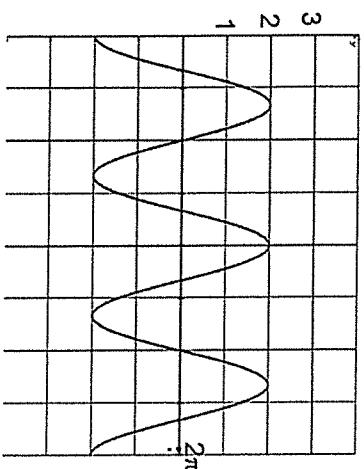
$$Amp = 15$$

$$\text{period} = \frac{2\pi}{\frac{2}{9}} = 2\pi \cdot \frac{9}{2} = 9\pi$$



Write the equation of this Cosine Function.

$$y = -2\cos 3x$$



$$\text{Amp} = 2$$

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

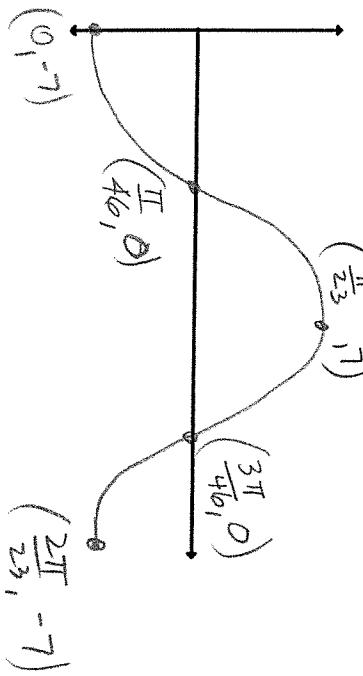
$$b = \frac{2\pi}{\frac{2\pi}{3}} = 2\pi \cdot \frac{3}{2\pi} = 3$$

$$a = -2$$

Graph one period of:  $y = -7\cos 23x$   
 label the coordinates of all min, max, and x-int.

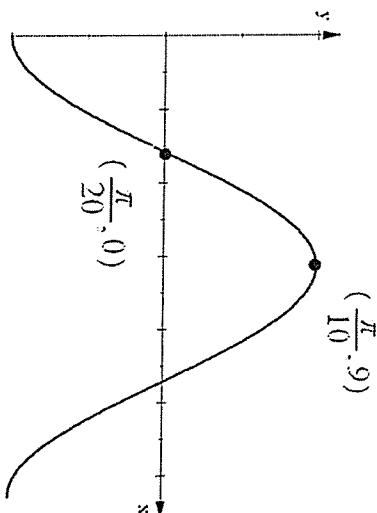
$$Amp = 7$$

$$\text{period} = \frac{2\pi}{23}$$



Write the equation of this Cosine Function:

$$y = -9\cos 10x$$



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

$$b = \frac{2\pi}{\frac{\pi}{5}} = 2\pi \cdot \frac{5}{\pi} = 10$$

$$\text{Amp} = 9$$

upsidedown  
 $a = -9$