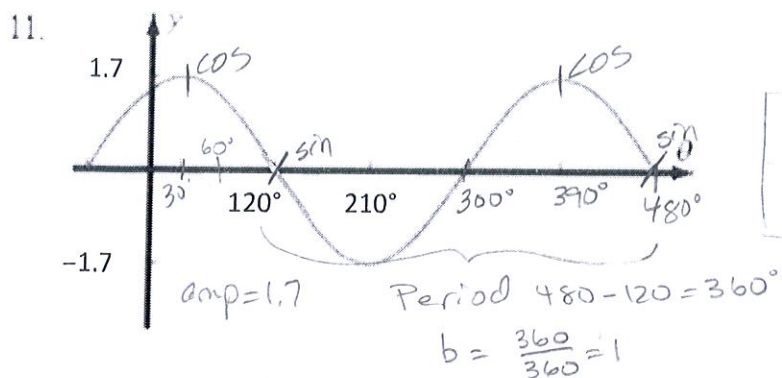
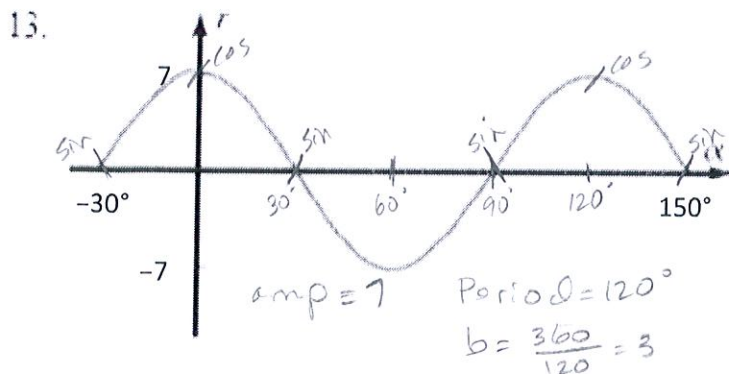


For Problems 9-14, find a particular equation of the sinusoid that is graphed.



$$y = -1.7 \sin(\theta - 120^\circ)$$

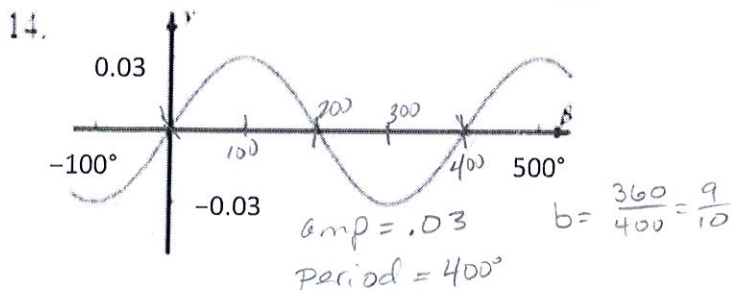
$$y = 1.7 \sin(\theta - 30^\circ)$$



$$y = 7 \cos 3\theta$$

$$y = -7 \sin 3(\theta - 30^\circ)$$

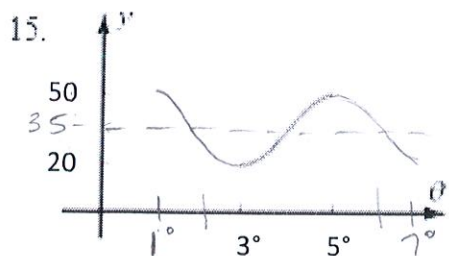
$$y = 7 \sin 3(\theta + 30^\circ)$$



$$y = .03 \sin \frac{9}{10} \theta$$

$$y = .03 \cos \frac{9}{10} (\theta - 100^\circ)$$

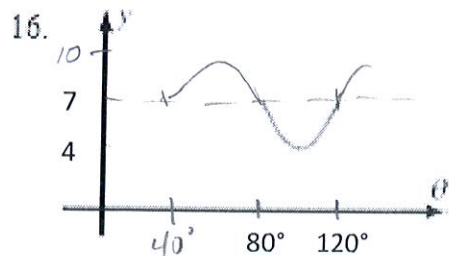
In Problems 15 and 16, a half-cycle of a sinusoid is shown. Find a particular equation of the sinusoid.



amp = 15  
Period  $= 7 - 3 = 4^\circ$   
 $b = \frac{360}{4} = 90^\circ$

$$y = -15 \cos 90^\circ (\theta - 3) + 35$$

$$y = 15 \cos 90^\circ (\theta - 1) + 35$$



amp = 3  
Period  $= 120 - 40 = 80^\circ$   
 $b = \frac{360}{80} = \frac{9}{2}$

$$y = 3 \sin \frac{9}{2} (\theta - 40^\circ) + 7$$