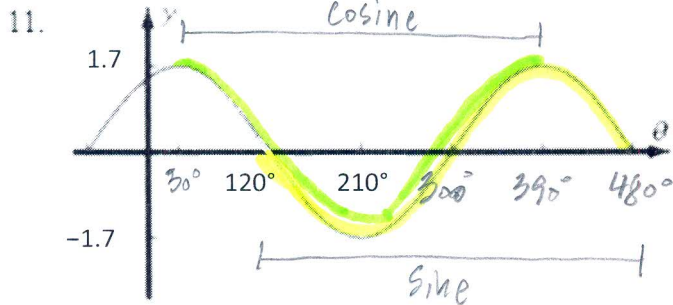
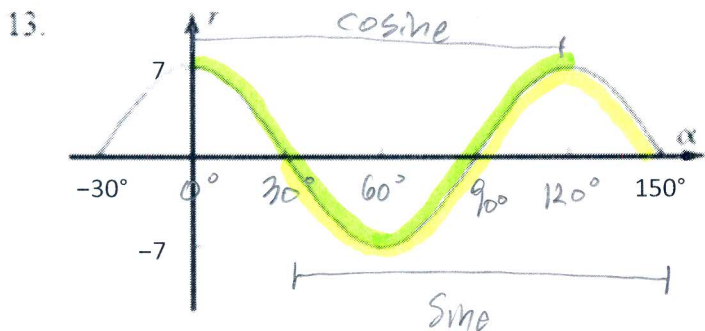


For Problems 9-14, find a particular equation of the sinusoid that is graphed.

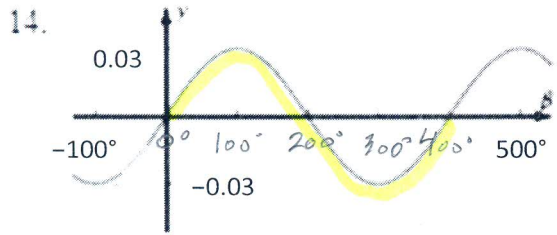
answers may vary



amp: 1.7  
per:  $360^\circ$   
vs: 0  
p.s:  $30^\circ \rightarrow y = 1.7 \cos(\theta - 30^\circ)$   
OR  
p.s:  $120^\circ \rightarrow y = -1.7 \sin(\theta - 120^\circ)$

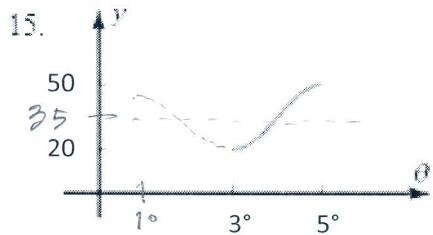


amp: 7  
per:  $120^\circ$   
vs: 0  
p.s:  $0 \rightarrow y = 7 \cos(3\theta)$   
OR  
p.s:  $30^\circ \rightarrow y = 7 \cos 3(\theta - 30^\circ)$   
 $y = 7 \cos(3\theta - 90^\circ)$



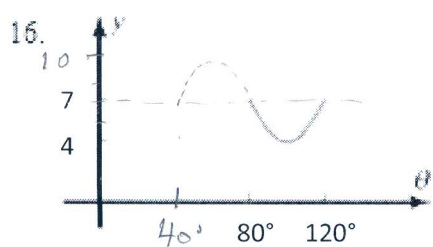
amp: 0.03  
per:  $400^\circ$   
vs: 0  
p.s:  $0 \rightarrow y = 0.03 \sin\left(\frac{9}{10}\theta\right)$

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



amp: 15  
per:  $4^\circ$   
vs: 35  
p.s:  $1^\circ \rightarrow y = 15 \cos 90(\theta - 1^\circ) + 35$   
 $y = 15 \cos(90\theta - 90^\circ) + 35$

$\frac{360^\circ}{b} = 400^\circ$   
 $b = \frac{360^\circ}{4^\circ}$   
 $b = \frac{360^\circ}{400^\circ}$



amp = 3  
pd =  $80^\circ$   
vs = 7  
p.s =  $40^\circ \rightarrow y = 3 \sin \frac{9}{2}(\theta - 40^\circ) + 7$   
 $y = 3 \sin\left(\frac{9}{2}\theta - 180^\circ\right) + 7$