

4.4 Graphing Sine and Cosine Without Phase Shifts

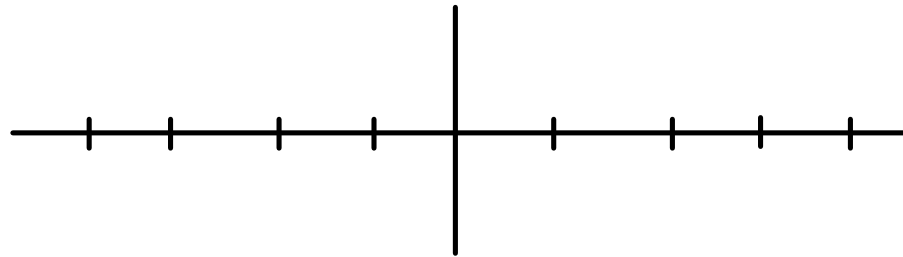
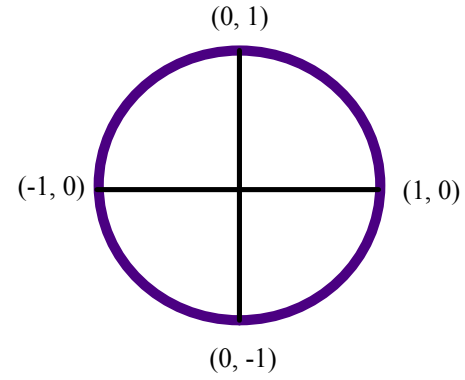
$$y = A \sin [k(\theta - c)] + d \quad y = A \cos [k(\theta - c)] + d$$

General Info:

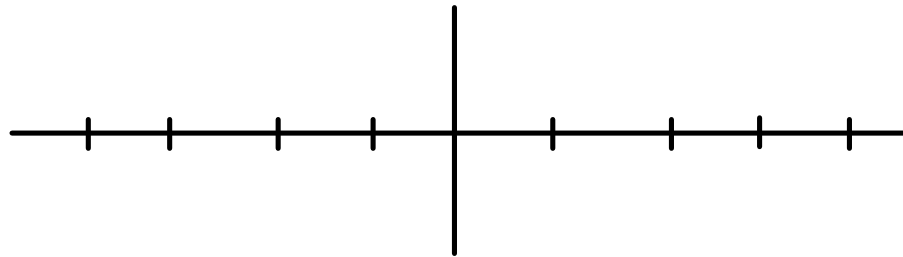
$|A|$ = amplitude
 c = phase shift
 $2\pi \div k$ = period
Period $\div 4$ = interval
 d = vertical shift

Graph By Hand....

1. $y = \cos \theta$

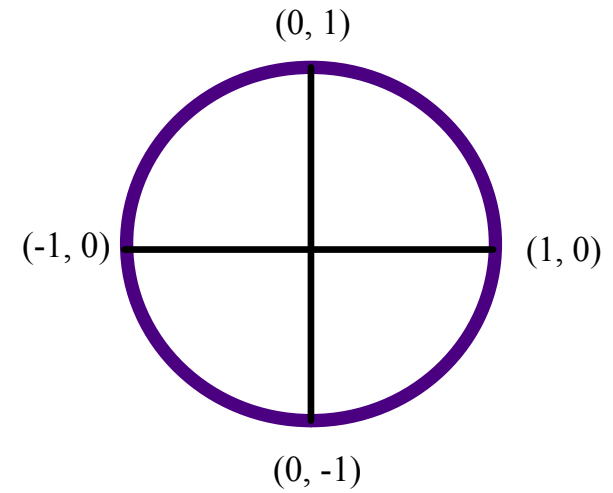
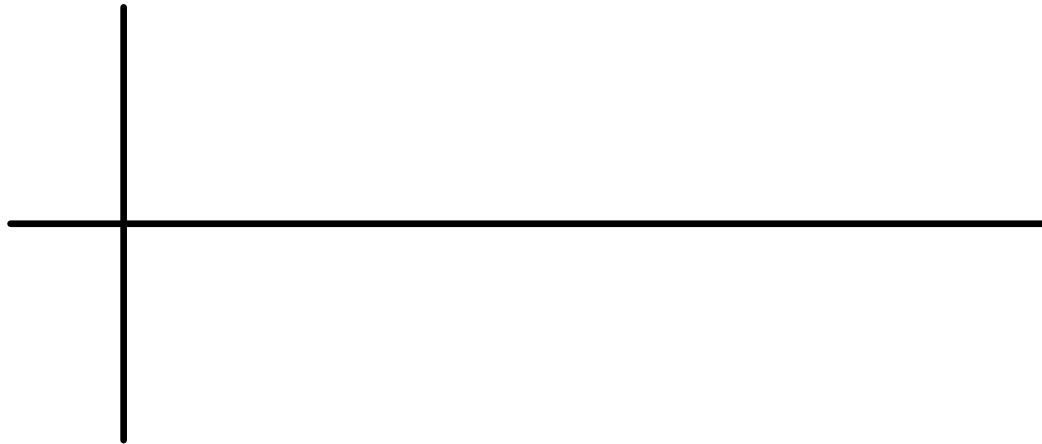


2. $y = \sin \theta$



Graph (from W.S.):

#5 $y = \frac{2}{3} \sin \theta$

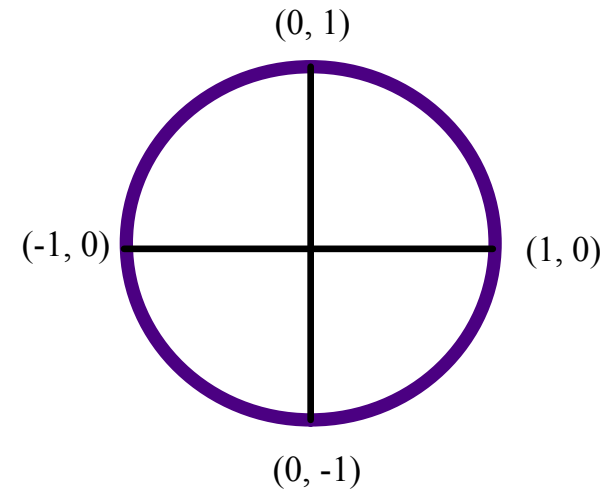
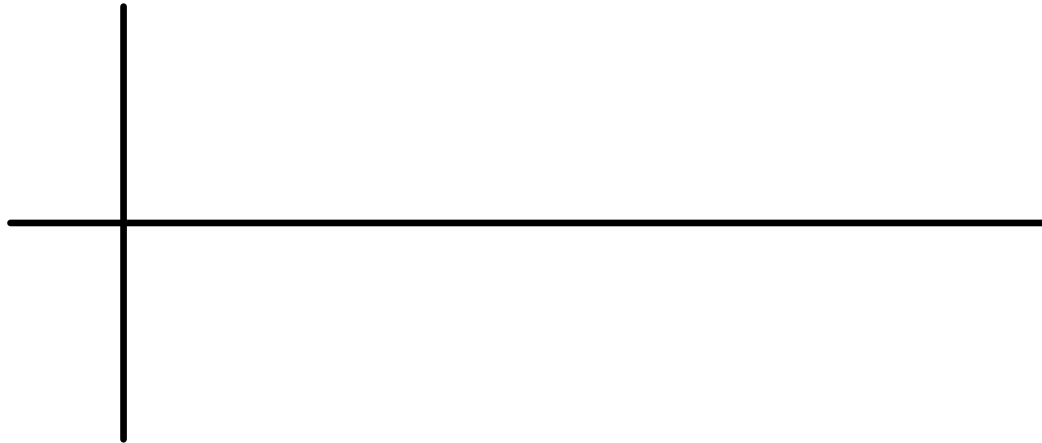


Amp.: _____ Period: _____

Interval: _____

Graph (from W.S.):

#8 $y = \cos(2x)$

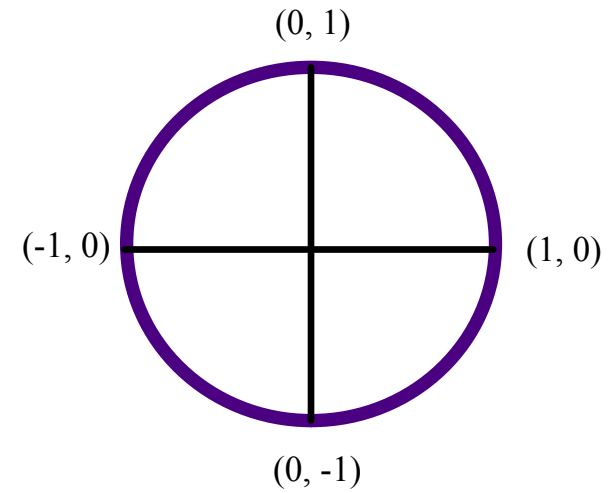
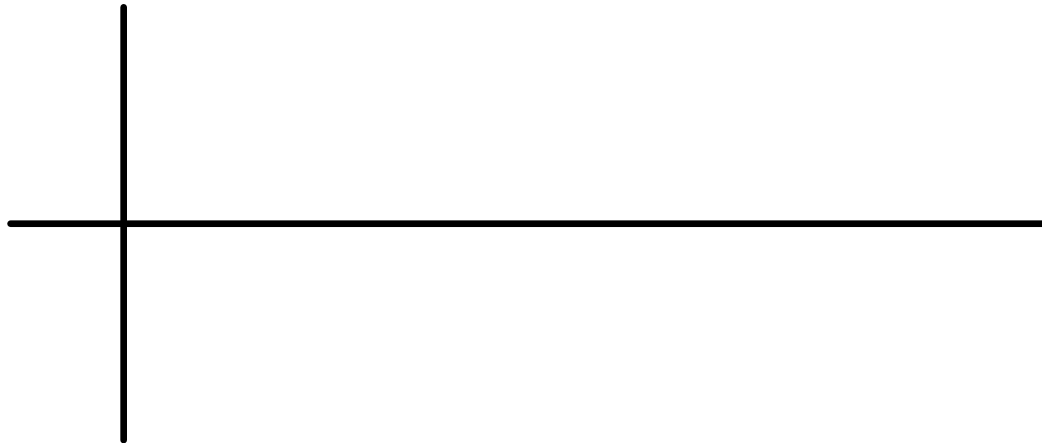


Amp.: _____ Period: _____

Interval: _____

Graph (from W.S.):

#15 $y = -3 \cos x$

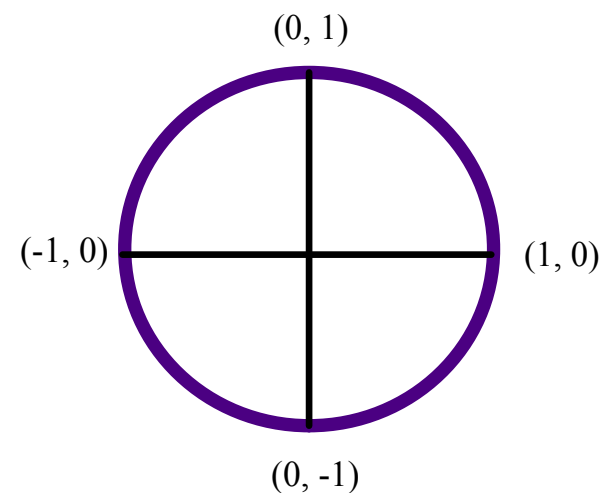
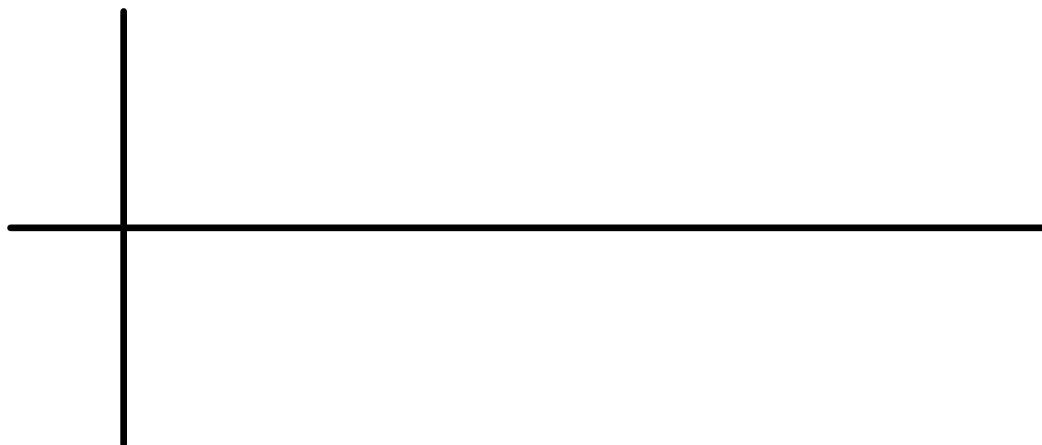


Amp.: _____ Period: _____

Interval: _____

Graph (from W.S.):

#16 $y = 2 \sin\left(\frac{1}{4}x\right)$



Amp.: _____ Period: _____

Interval: _____

Assignment:

Graphing Sin and Cos without phase shifts W.S.