

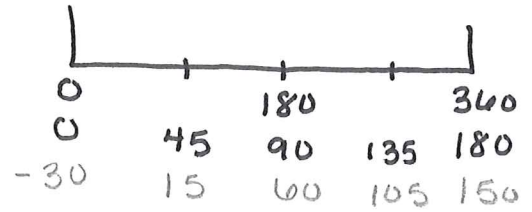
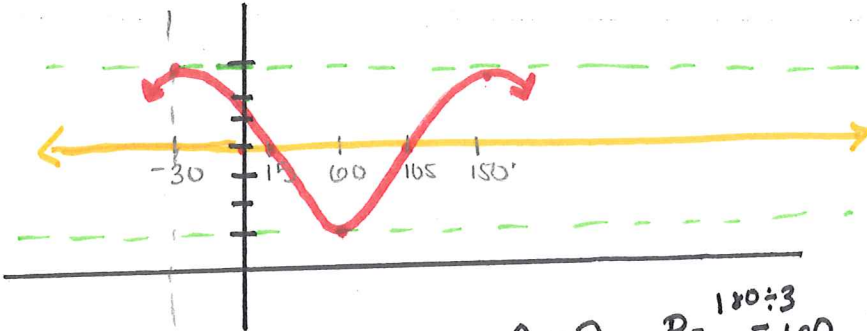
Trig Transformations Day 2 Hwk
 Supp Alg 2 14.2 Radians & Equation Writing

Name Key

Sketch a graph of the following. State the amplitude, period, vertical shift and phase shift.

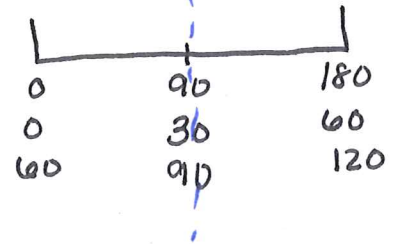
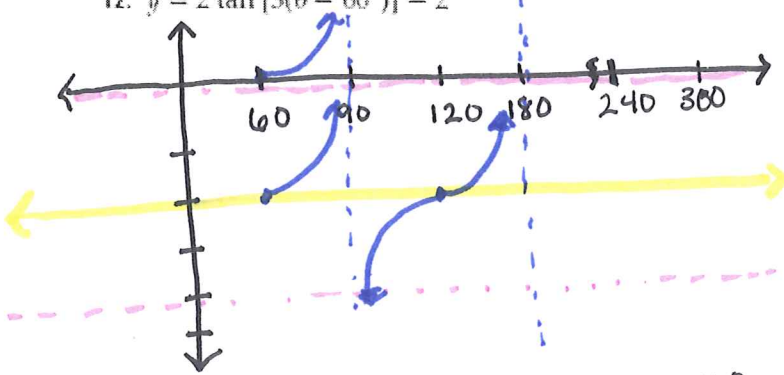
11. $y = 3 \cos [2(\theta + 30^\circ)] + 4$

amp = 3 period: 180 vs: upH ps: left 30



12. $y = 2 \tan [3(\theta - 60^\circ)] - 2$

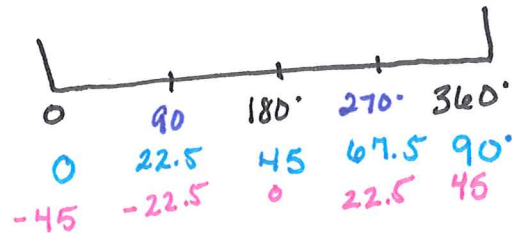
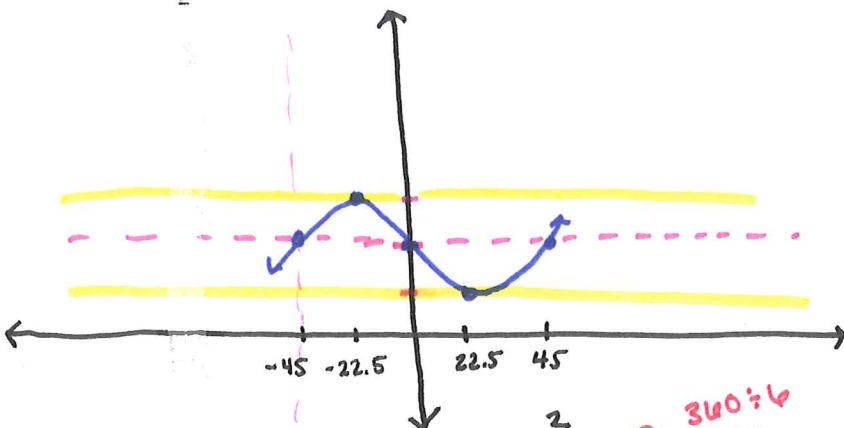
A = 2 P = 180/3 = 60 PS: right 60



13. $y = \frac{1}{2} \sin [4(\theta + 45^\circ)] + 1$

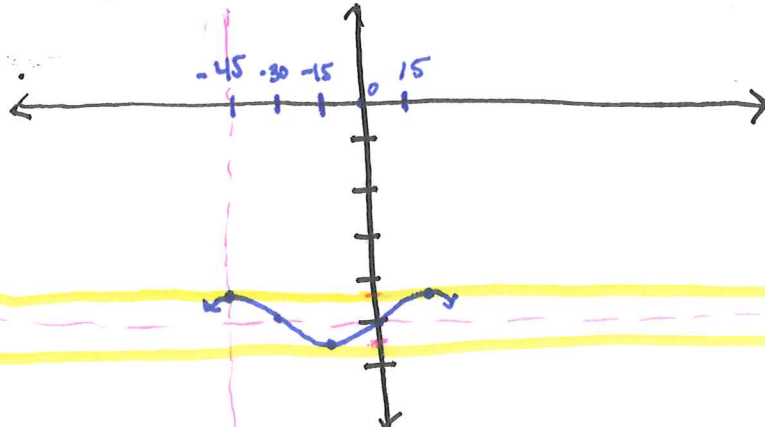
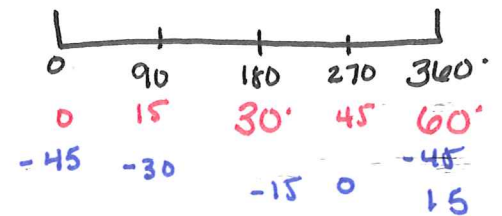
A = 1/2 P = 360/4 = 90 V.S. up 1

P.S. left 45



14. $y = \frac{2}{5} \cos [6(\theta + 45^\circ)] - 5$

A = 2/5 P = 360/6 = 60

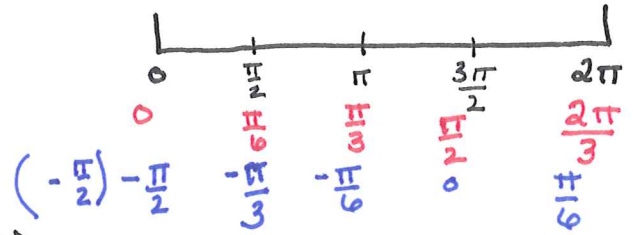
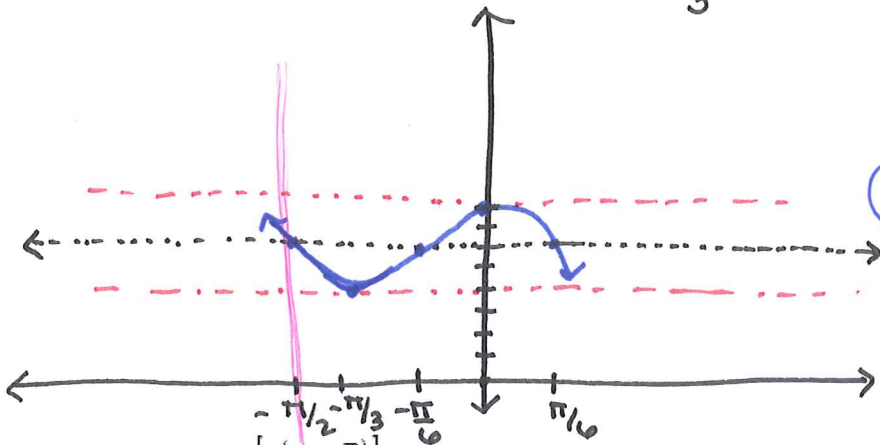


-4.6
 } -5
 } -5.4

15. $y = 6 - 2 \sin \left[3 \left(\theta + \frac{\pi}{2} \right) \right]$

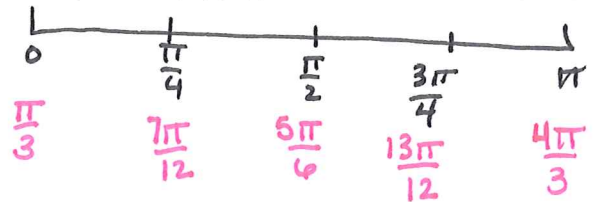
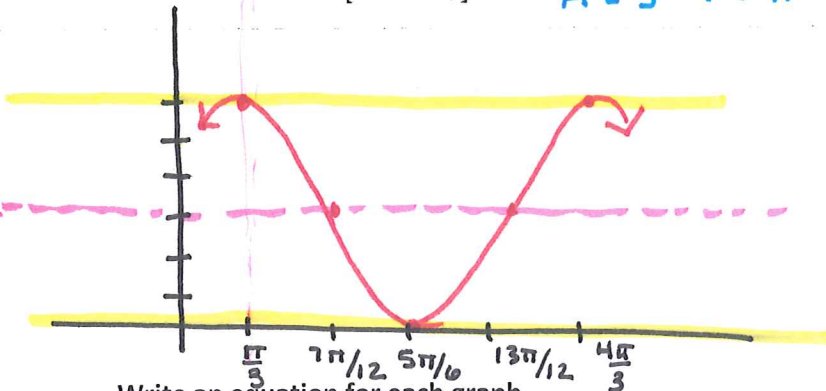
$A = 2$ $P = \frac{2\pi}{3}$

VS: up \downarrow PS: left $+\frac{\pi}{2}$

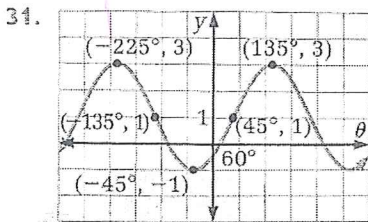


16. $y = 3 + 3 \cos \left[2 \left(\theta - \frac{\pi}{3} \right) \right]$

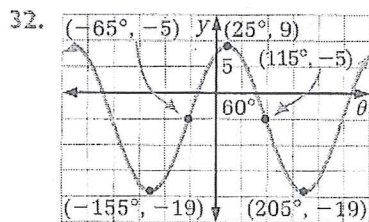
$A = 3$ $P = \pi$ VS: up 3 phi: Right $\pi/3$



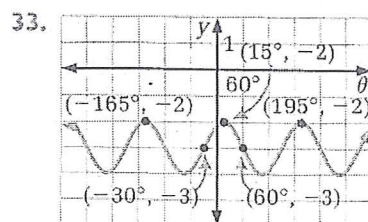
Write an equation for each graph.



$y = 2 \sin(\theta - 45^\circ) + 1$
OR
 $y = 2 \cos(\theta + 225^\circ) + 1$



$y = 14 \sin(\theta + 65^\circ) - 5$
OR
 $y = -14 \cos(\theta + 155^\circ) - 5$



$y = \sin 2(\theta + 30^\circ) - 3$
OR
 $y = \cos 2(\theta + 165^\circ) - 3$