Trig 6.5

Find the phase shift and vertical translation for sine and cosine
Write equations given amplitude, period, phase shift and vertical translation
Graph compound functions
Recognize the graph of tangent

amplitude

period

phase shift

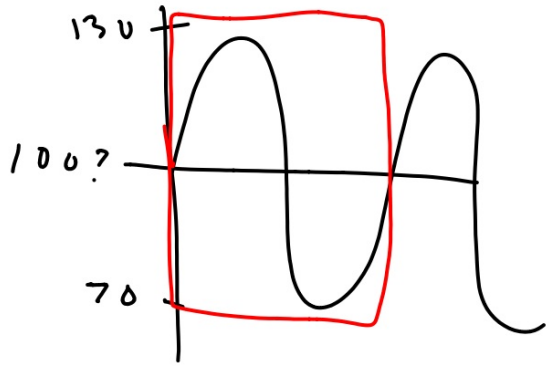
vertical translation

compound function

tangent

whiteboards?

(13) $y = 100 \pm 30 \sin 2\pi(\theta \quad)$



$\frac{2\pi}{n} = \frac{1}{1}$

$n = 2\pi$

reminder: use factored form to see phase shift
whiteboards

Lesson 6-5 *(Pages 378–386)*

State the phase shift for each function. Then graph each function.

1. $y = \sin(2\theta - \pi)$

2. $y = 2\cos(\theta + 2\pi)$

$2(\quad)$

3. $y = \sin\left(\frac{\theta}{2} + \frac{\pi}{2}\right)$

$\frac{1}{2}$( )

Write an equation of the sine function with each amplitude, period, phase shift, and vertical shift.

4. amplitude $= 2$, period $= 2\pi$, phase shift $= \pi$, vertical shift $= -1$

5. amplitude $= 0.5$, period $= \frac{\pi}{4}$, phase shift $= 0$, vertical shift $= 3$

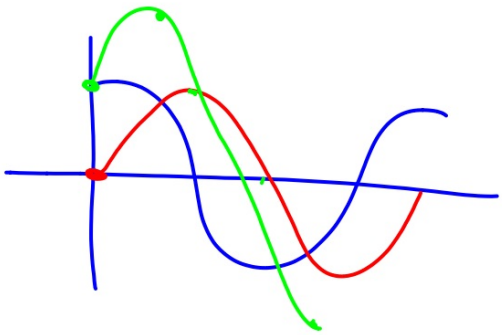
Write an equation of the cosine function with each amplitude, period, phase shift, and vertical shift.

6. amplitude $= 20$, period $= \frac{\pi}{2}$, phase shift $= 2\pi$, vertical shift $= 4$

7. amplitude $= \frac{3}{4}$, period $= 10$, phase shift $= 0$, vertical shift $= \frac{1}{2}$

composite functions:
(technology)

$y = \cos x - \sin x$



change to degrees (for now) easier to graph by hand
table of values

$y = \tan \theta$