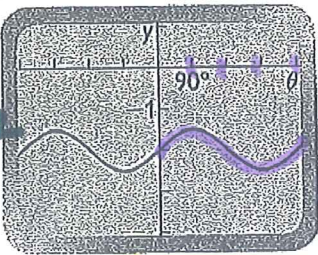


Trig Transformations WARM UP!  
Supp Alg 2 14.2

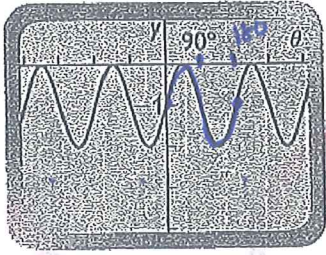
Name Key

1. Determine the amplitude and period of each function, then state the b value.

Amp:  $\frac{1}{2}$   
vs: down 2



B.  $b=2$   
 $a: 1$   
vs: down 1

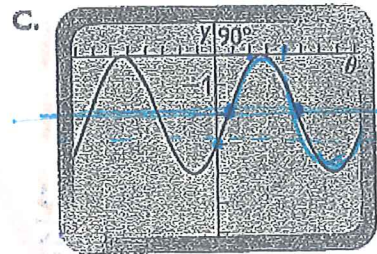


$Y = \sin \theta - 1$

Period = 360  
 $b = 1$

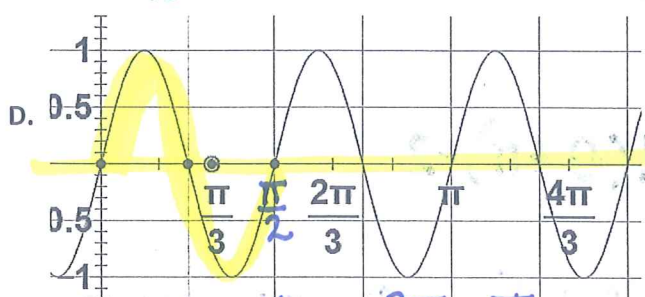
$Y = \frac{1}{2} \sin \theta - 2$

Amp: 2  
PS: 90° Right  
 $\frac{\pi}{2}$  Right  
P: 720  $b = \frac{1}{2}$   
vs: down 2



$Y = 2 \sin \frac{1}{2}(\theta - \frac{\pi}{2}) - 2$

$Y = 5 \sin 2(\theta + 75^\circ) + 6$

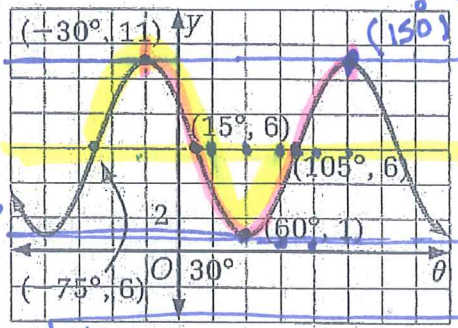


$Y = \sin 4\theta$   $b = 4$

$\frac{2\pi}{b} = \frac{\pi}{2}$

vs: up 6  
Amp: 5

E. PS: left 30°  
Period: 180°  
 $\frac{360^\circ}{b} = 180^\circ$   
 $b = 2$



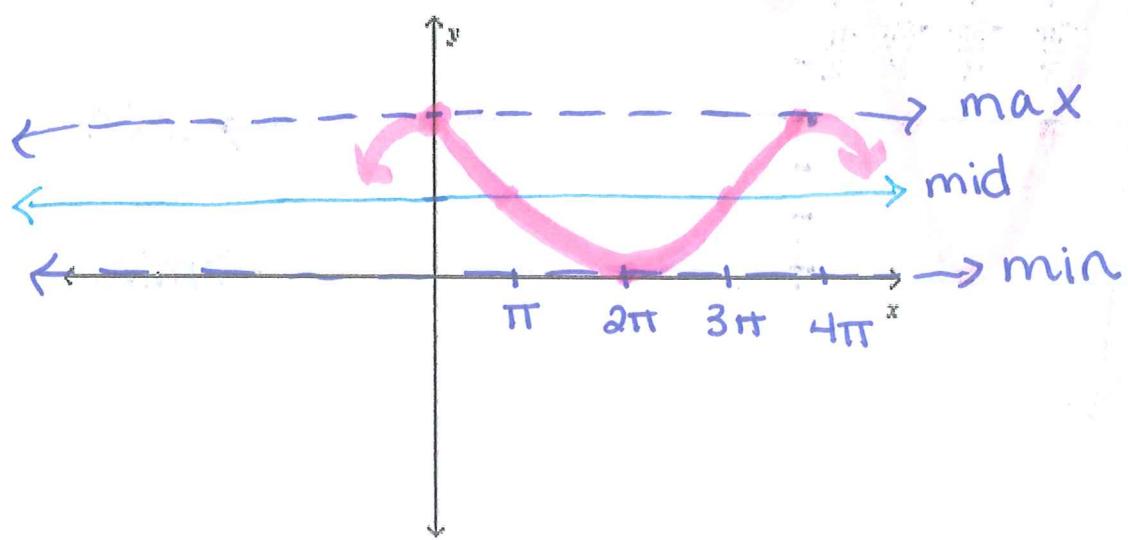
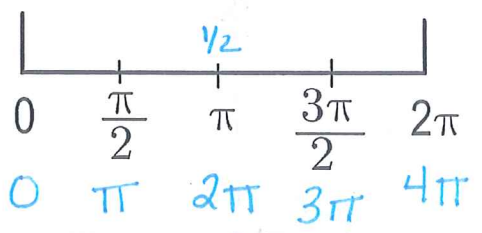
sine  
PS: left + 75

$Y = 5 \cos 2(\theta + 30^\circ) + 6$

2.  $y = \cos \frac{1}{2} \theta + 1$

$\frac{2\pi}{(\frac{1}{2})} = 4\pi$

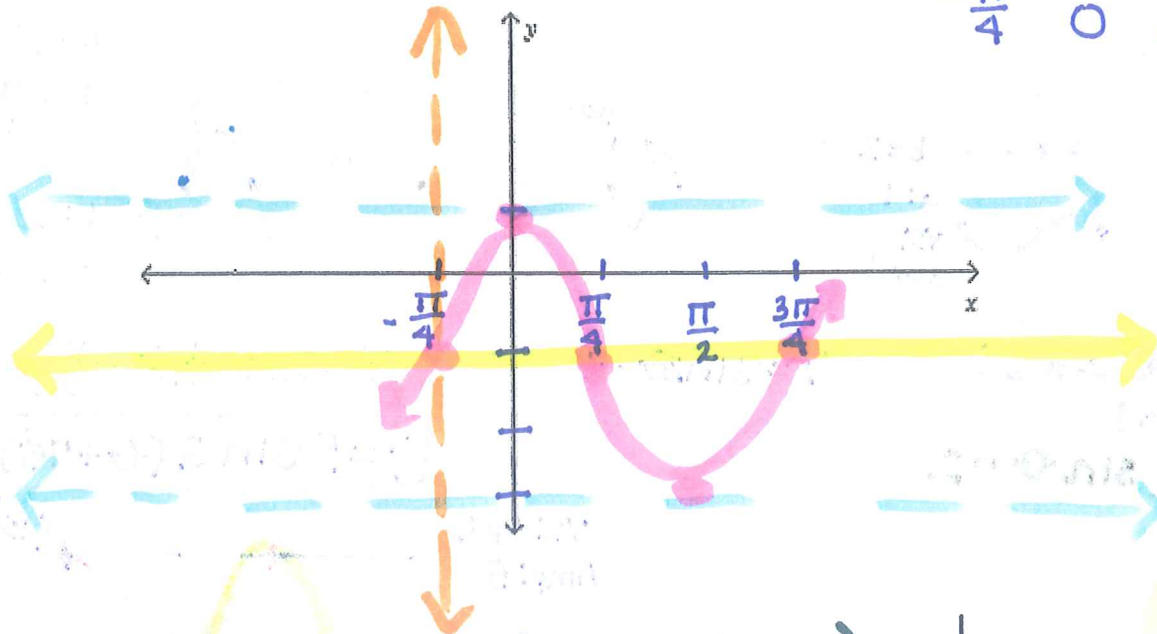
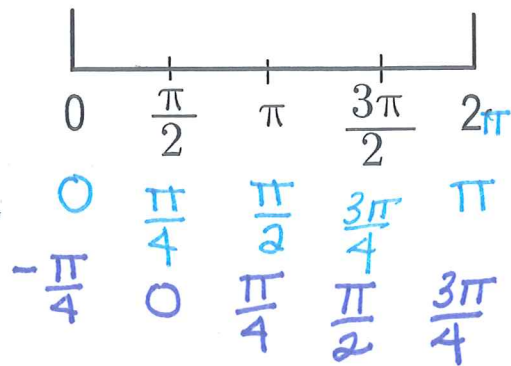
Amp: 1 Per:  $4\pi$  V.S: up 1 P.S. none



$$y = 2 \sin 2(\theta + \frac{\pi}{4}) - 1$$

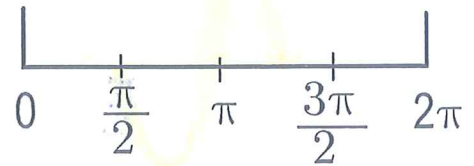
$$3. y = 2 \sin(\theta + \frac{\pi}{4}) - 1$$

Amp: 2 Per:  $\pi$  V.S: down 1 P.S: left  $\frac{\pi}{4}$



~~$$4. y = 3 \cos(\theta + \pi) - 2$$~~

$$y = 3 \cos 4(\theta + \pi) - 2$$



Amp: 3 Per:  $\frac{\pi}{2}$  V.S: down 2 P.S: left  $\pi$

