

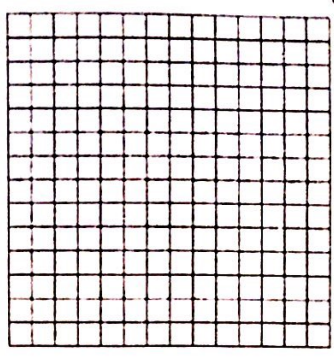
#1)  $y = 2\sin\theta - 1$

Amp: 2      Period:  $\frac{2\pi}{1} = 2\pi$   
 Phase Shift: 0      Midline: -1

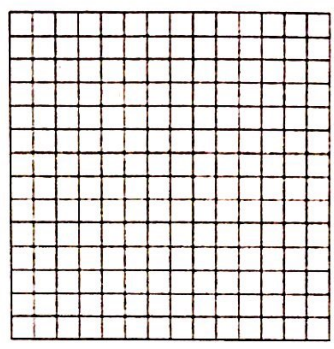
#2)  $y = \cos 2\theta + 3$

Amp: 1      Phase Shift: 0  
 Period:  $\frac{2\pi}{2} = \pi$       Midline: 3

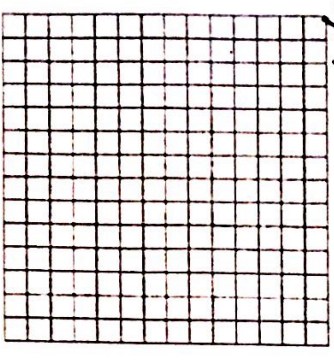
3)  $f(x) = \sin(\frac{1}{5}\theta) + 1$



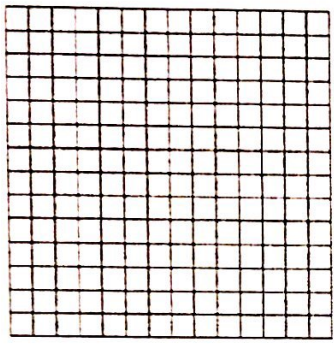
4)  $f(x) = \cos(\frac{1}{4}\theta) - 4$



5)  $y = -\sin\theta + 3$



6)  $f(x) = -3\cos\theta + 2$



Ex 1

Amp: 2      Phase Shift: 0

Period:  $6\pi$       Midline: 4

a: 2    b:  $\frac{1}{3}$     c: 0    d: 4

$$\frac{2\pi}{b} = \frac{6\pi}{1} \quad \frac{2\pi}{6\pi} = \frac{6\pi b}{6\pi}$$

Ex 2

Amp: 4      Phase Shift: 0

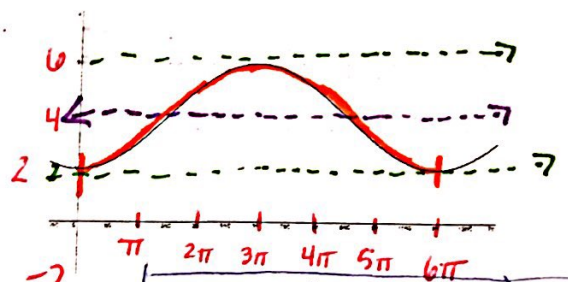
Period:  $\frac{2\pi}{3}$       Midline: -2

a: 4    b: 3    c: 0    d: -

$$\frac{2\pi}{3} = \frac{2\pi}{b}$$

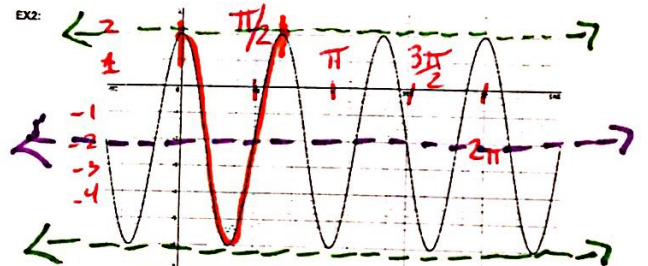
GUIDED NOTES: Graphs of Sine and Cosine

EX1:



$$y = -2 \cos\left(\frac{1}{3}\theta\right) + 4$$

EX2:



$$y = 4 \cos 3\theta - 2$$