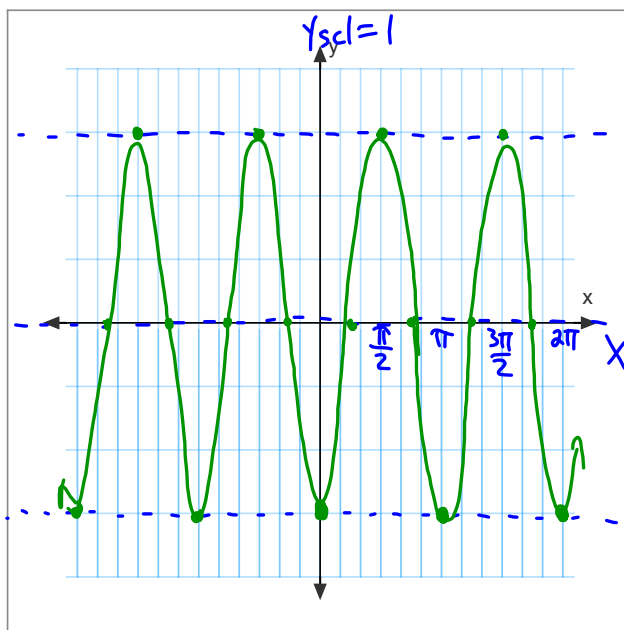


5.1 Graphing $y=asin(bx)$ and $y=acos(bx)$

1. Sketch an accurate graph of $y=-3\cos(2x)$.



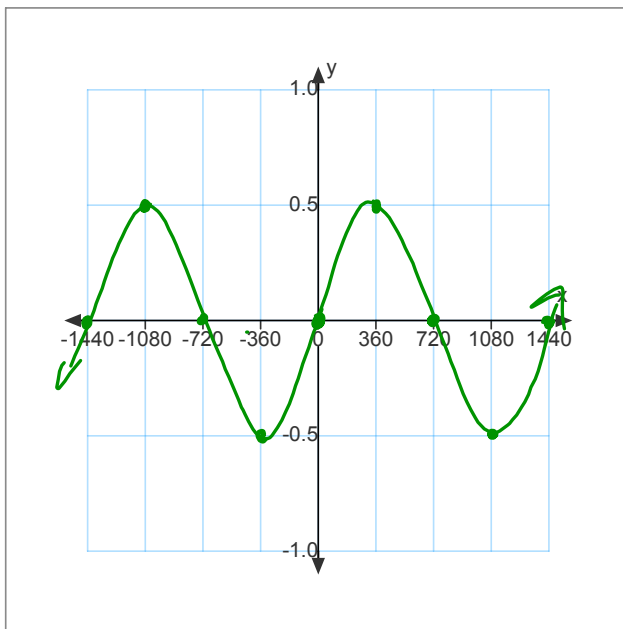
amp = 3 (vs by 3)

refl. over x-axis

per = π (hs by $\frac{1}{2}$)

$x_{scl} = \frac{\pi}{6}$

2. Sketch an accurate graph of a sine curve with amplitude of $\frac{1}{2}$ and period 1440° . State the equation of the function.

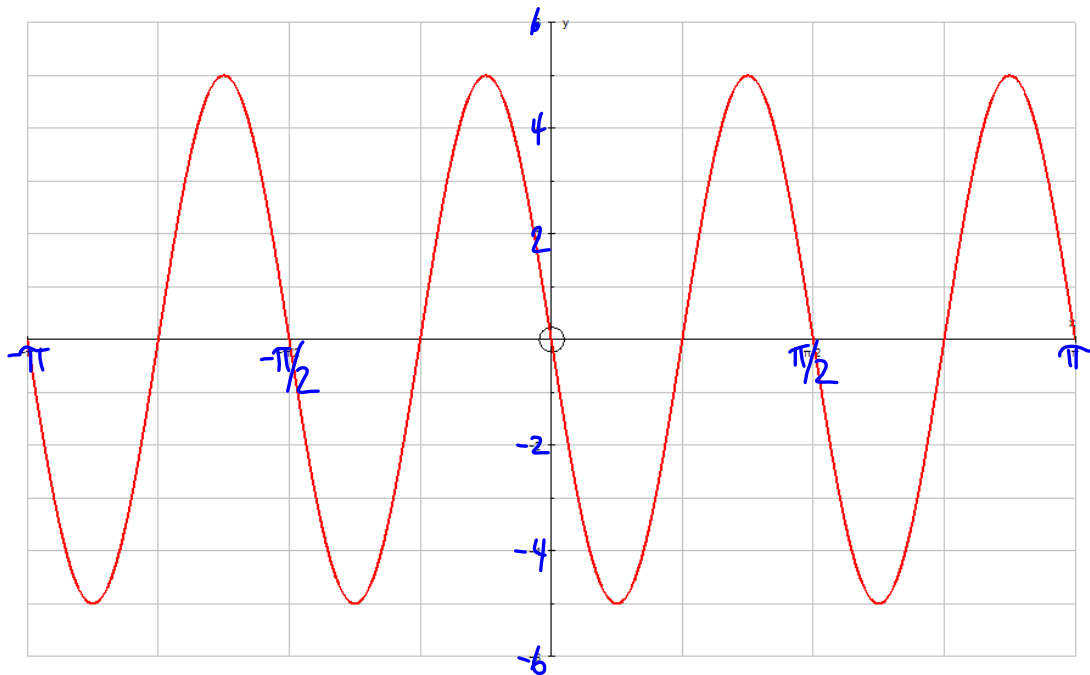


$$HS: \frac{1440^\circ}{360^\circ} = 4 \text{ times "wider"}$$

$$VS: \frac{1}{2} \text{ as tall}$$

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

3. Determine the equation of this graph. $y = -5 \sin(4x)$



$$\text{per} = \pi/2 \text{ is } 1/4 \text{ of } 2\pi \therefore b = 4$$

page 233-237 #9, 10, 12, 14, 17, 18, 21, 22, C2, C4, C5