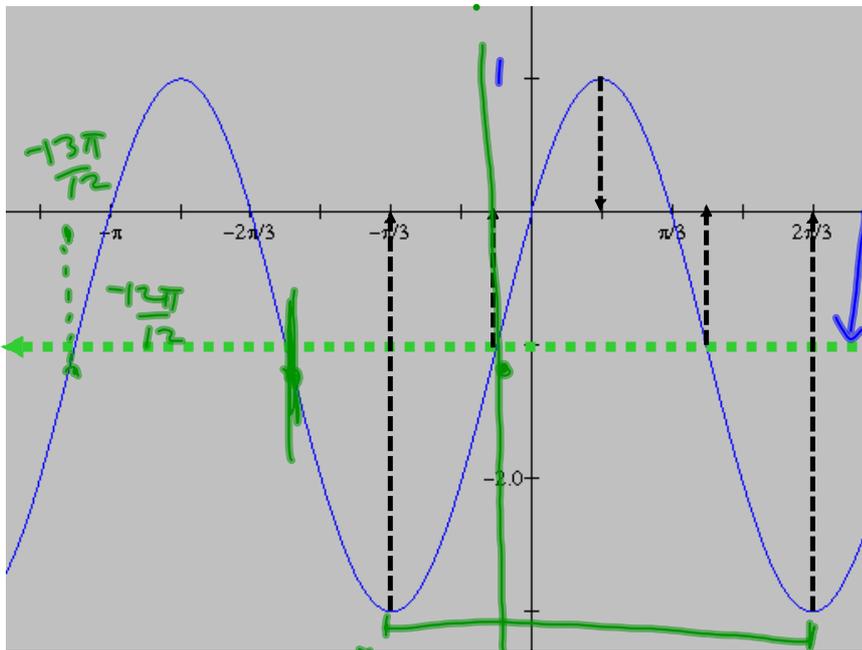


Find a Sine and Cosine Equation From the Graph:



Vertical Shift = Down
Amplitude = 2

Period = π

$$\frac{2\pi}{K} = \text{Period}$$

$$K = \frac{2\pi}{\text{Period}}$$

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

Right - Left
 $\frac{2\pi}{3} - \left(-\frac{\pi}{3}\right)$
 $\frac{3\pi}{3} = \pi$

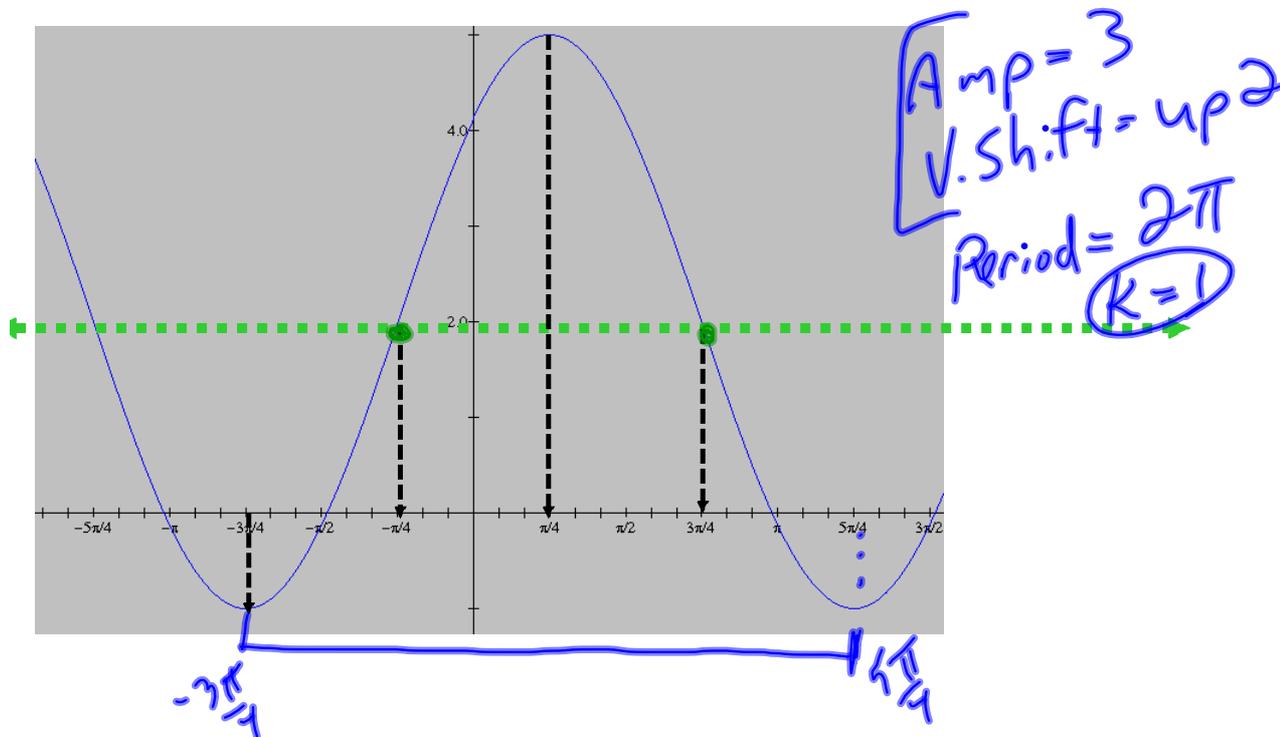
$$y = 2 \sin\left[2\left(0 + \frac{13\pi}{12}\right)\right] - 1 \quad \text{✗}$$

$$y = -2 \sin\left[2\left(0 - \frac{5\pi}{12}\right)\right] - 1 \quad \text{✗}$$

$$y = 2 \cos\left[2\left(0 - \frac{\pi}{6}\right)\right] - 1 \quad \text{✗}$$

$$y = -2 \cos\left[2\left(0 + \frac{\pi}{12}\right)\right] - 1 \quad \text{✗}$$

Find a Sine and Cosine Equation From the Graph:



$$y = 3 \sin\left(\theta + \frac{\pi}{4}\right) + 2$$

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

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

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

$-\frac{5\pi}{4}$

Pg. 252

#11, 13, 14, 15, 16, 17, 21

Wavelength \Rightarrow Period