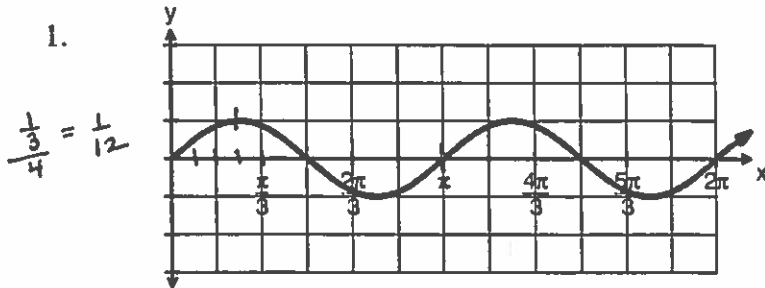


For each function below:

Create 2 equations that would produce the graph (one for sine and cosine).

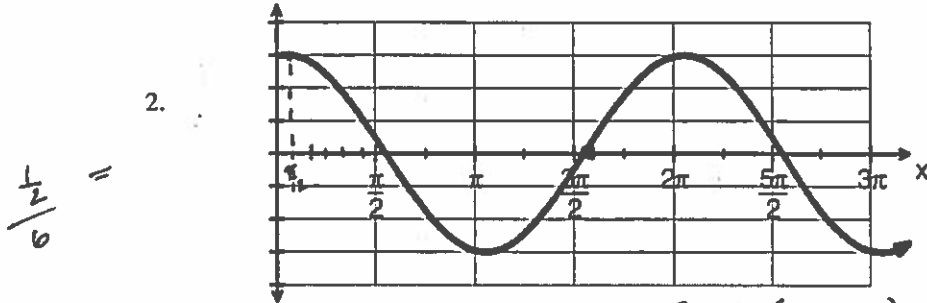


$$\frac{1}{4} = \frac{1}{12}$$

Amp = 1
 SA $y = 0$
 $P = \pi$
 $HS = \frac{\pi}{2\pi} = \frac{1}{2}$

$$y = \cos 2(x - \frac{\pi}{4})$$

$$y = \sin 2(x)$$



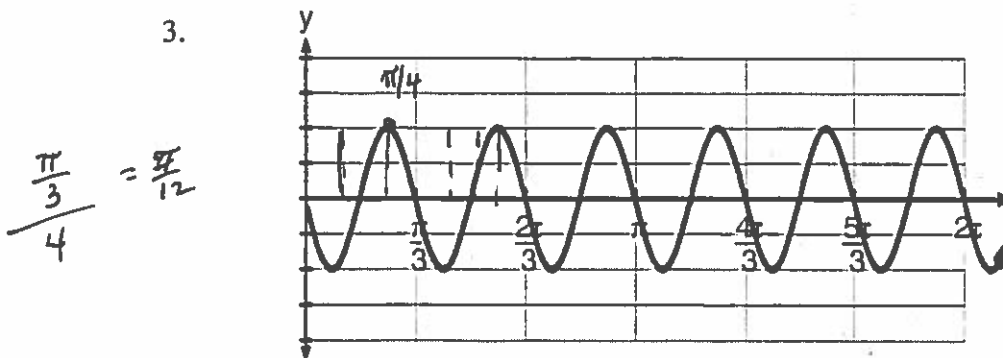
$$\frac{1}{2} =$$

Amp: 3
 SA $y = 0$
 $P = 2\pi$
 $HS = 1$

$$y = 3 \cos(x - \frac{\pi}{12})$$

$$y = 3 \sin(x - \frac{19\pi}{12})$$

$$\frac{3\pi}{2} + \frac{\pi}{12}$$



$$\frac{\pi}{3} = \frac{\pi}{12}$$

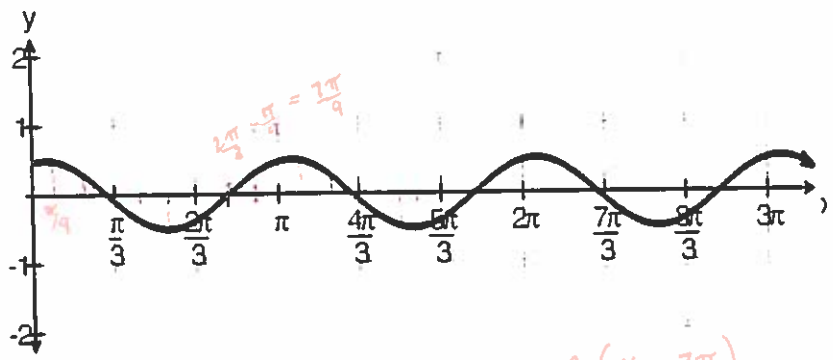
$$P = \frac{\pi}{3}$$

$$HS = \frac{\pi}{3} \div 2\pi = \frac{1}{6}$$

$$y = 2 \cos 6(x - \frac{\pi}{4})$$

$$y = 2 \sin 6(x - \frac{\pi}{6})$$

4.



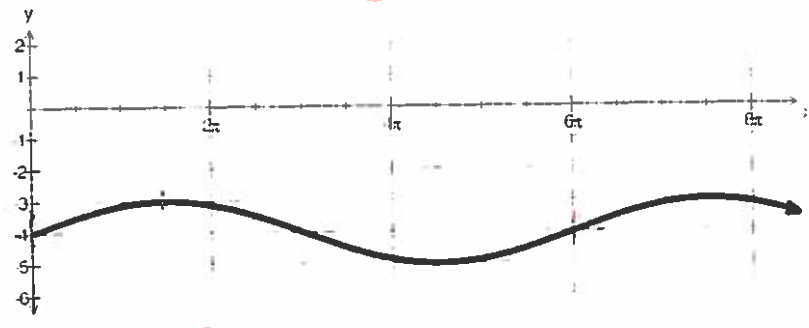
Amp = 0.5 (1/2)
 SA $y=0$
 $\rho = \pi$

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

$$y = \frac{1}{2} \sin 2(x - \frac{7\pi}{9})$$

$$y = \frac{1}{2} \cos 2(x - \pi/9)$$

5.

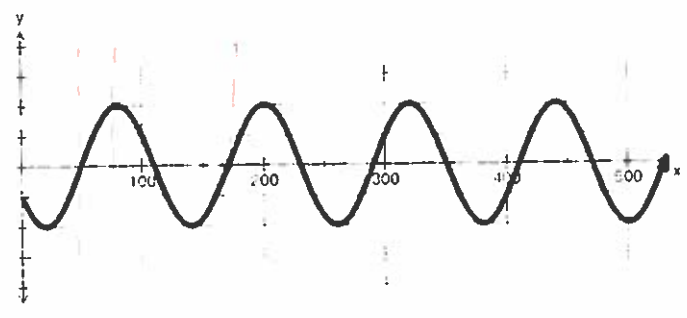


$\rho = 6\pi$
 $HS = \frac{6\pi}{2\pi} = 3$

$$y = \sin \frac{1}{3}(x) - 4$$

$$y = \cos \frac{1}{3}(x - \frac{3\pi}{2}) - 4$$

6.



$\rho = 175$
 $HS = \frac{175}{2\pi}$

$$y = 2 \sin \frac{2\pi}{175}(x - 50)$$

$$y = 2 \cos \frac{2\pi}{175}(x - 75)$$