

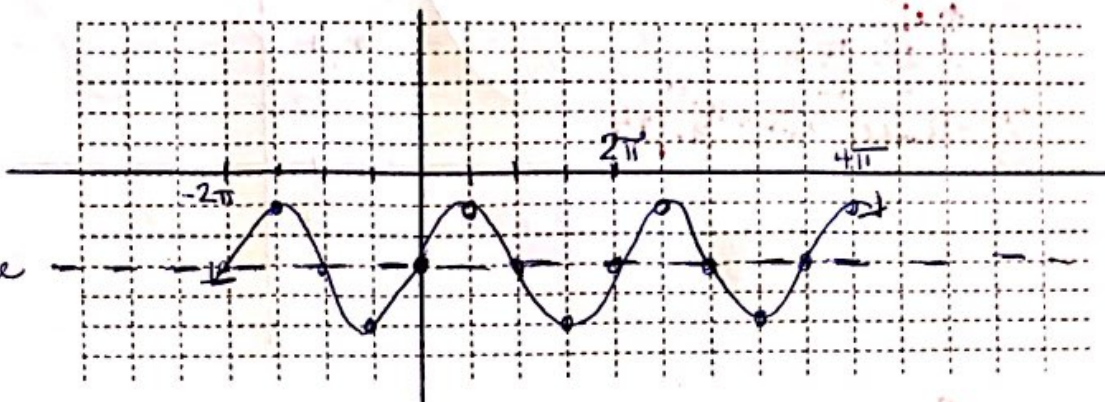
Graphing Sine & Cosine Practice

Name _____

1. $y = 2\sin x - 3$

- a: 2
- p: 2π
- vs: $\downarrow 3$
- ps: none

Midline



2. $y = -3\cos\left(\frac{1}{2}x\right)$

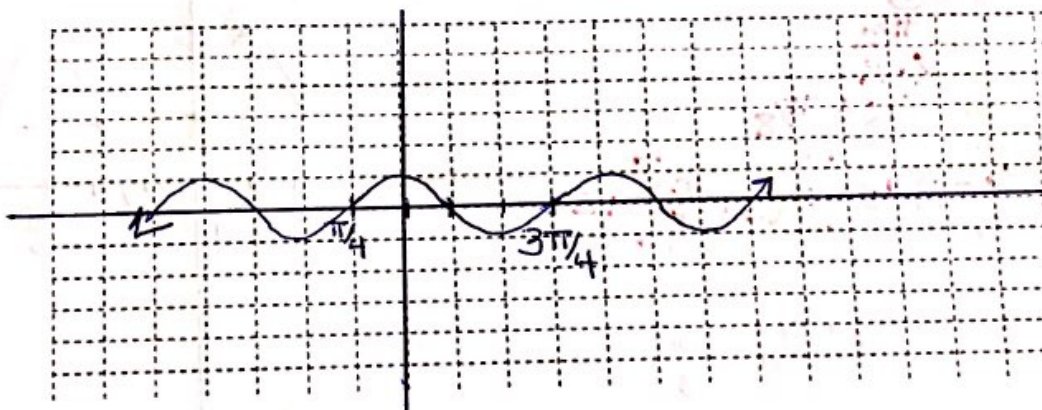
- a: 3
- p: 4π
- vs: none
- ps: none



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

- a: 1
- p: π
- vs: none
- ps: left $\pi/4$

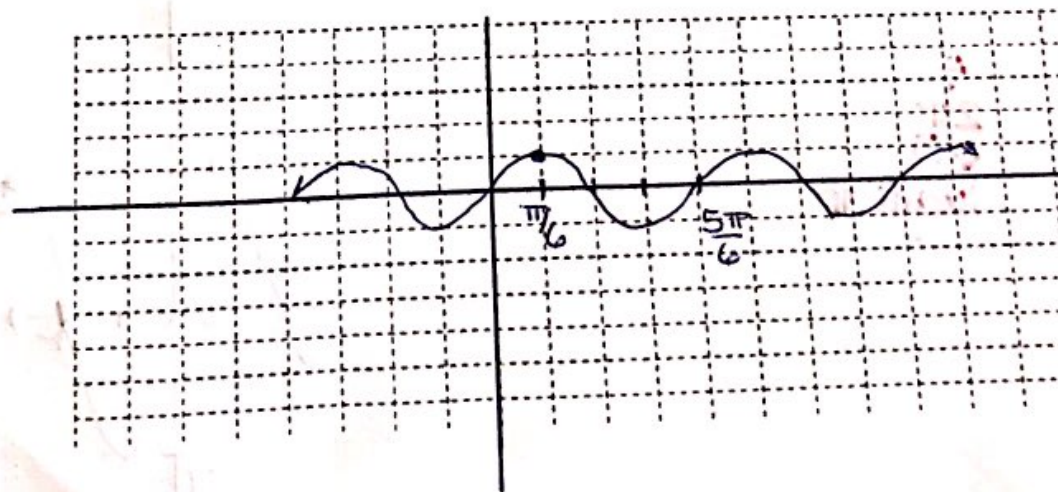
$$-\frac{\pi}{4} + \pi = \frac{3\pi}{4}$$



4. $y = \cos\left(3\left(x - \frac{\pi}{6}\right)\right)$

- a: 1
- p: $2\pi/3$
- vs: none
- ps: right $\pi/6$

$$\frac{\pi}{6} + \frac{2\pi}{3} = \frac{5\pi}{6}$$



5. $y = -2 \sin(3x + \pi) + 4$

a: 2

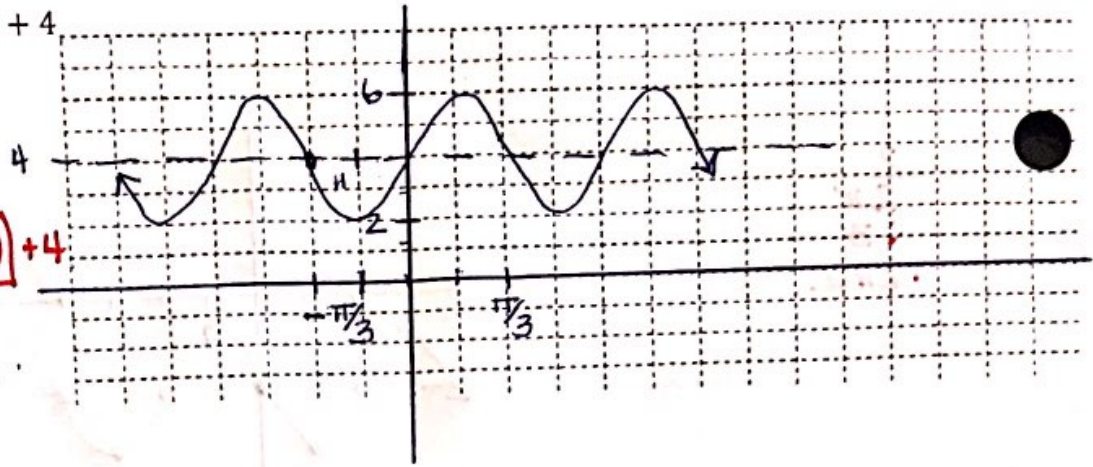
p: $2\pi/3$

vs: ↑ 4

ps: left $\pi/3$

$y = -2 \sin[3(x + \pi/3)] + 4$

$-\frac{\pi}{3} + \frac{2\pi}{3} = \frac{\pi}{3}$



6. $y = -2 \cos(4x + \pi) - 1$

a: 2

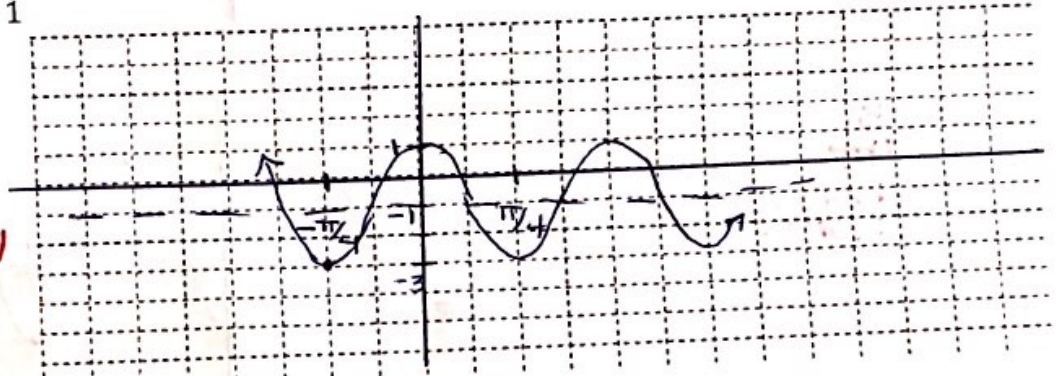
p: $\pi/2$

vs: ↓ 1

ps: left $\pi/4$

$y = -2 \cos[4(x + \pi/4)] - 1$

$-\frac{\pi}{4} + \frac{2\pi}{2} = \frac{\pi}{4}$



7. $y = 3 \cos(4x + \frac{\pi}{2}) + 2$

a: 3

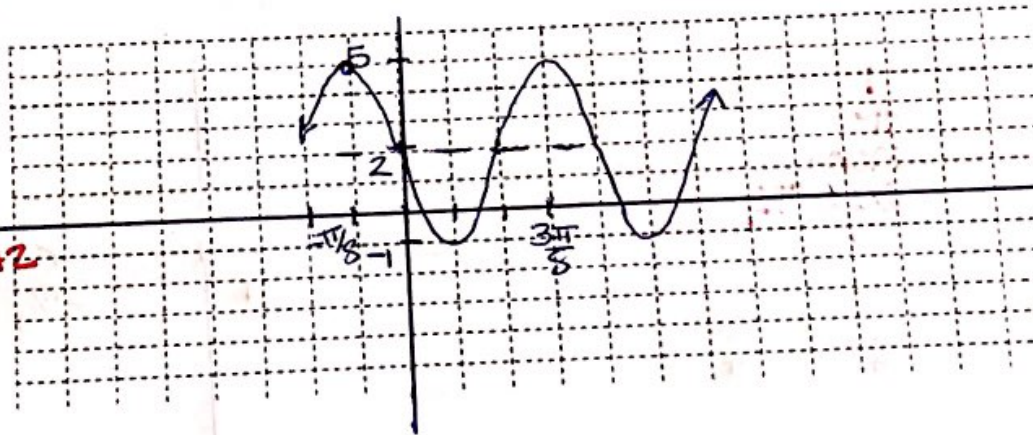
p: $\pi/2$

vs: ↑ 2

ps: left $\pi/8$

$y = 3 \cos[4(x + \pi/8)] + 2$

$-\frac{\pi}{8} + \frac{\pi}{2} = \frac{3\pi}{8}$



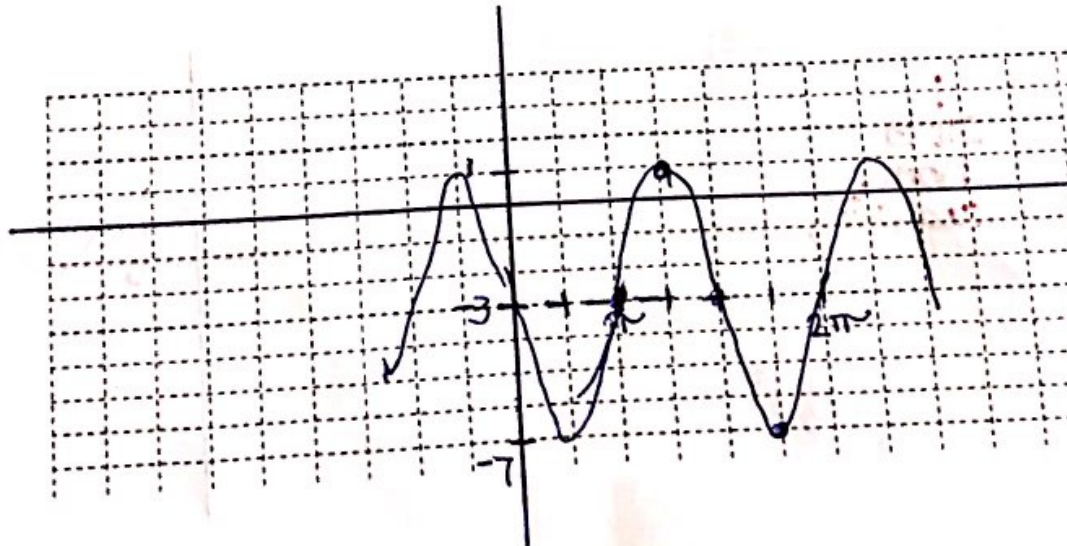
8. $y = 4 \sin(x - \pi) - 3$

a: 4

p: 2π

vs: ↓ 3

ps: right π



37) $y = 5 \cos\left(\frac{\pi}{4}\theta\right)$ 39) $y = -3 \cos\left(\frac{1}{2}\theta\right)$

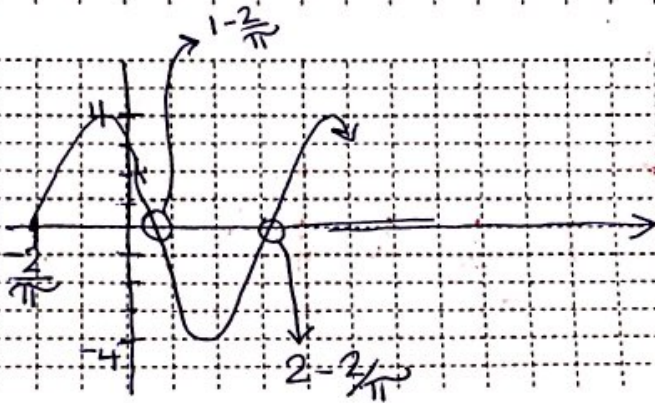
41) $y = \frac{3}{4} \sin(2\pi\theta)$

57)

$A = 4$

$Pd = 2$

$PS = -\frac{2}{\pi}$

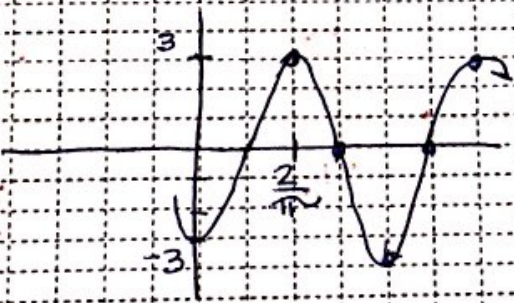


59)

$A = 3$

$Pd = 2$

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



61)

$A = 3$

$Pd = 3$

$PS = \frac{\pi}{4}$

63) $y = 3 \sin(2x)$

65) $y = 3 \sin(\pi x)$

69) $y = 3 \sin\left[\frac{2}{3}\left(x + \frac{1}{3}\right)\right]$

67) $y = 2 \sin\left[2\left(x - \frac{1}{2}\right)\right]$