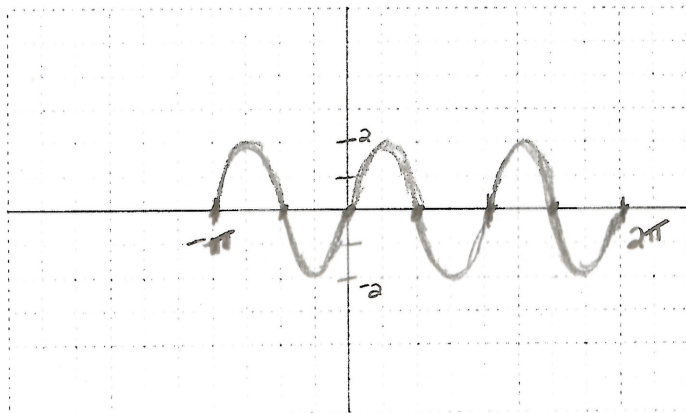


Pre-Calc Trig 3.2, 3.3 In-Class WS

Name _____

Graph the following Trig functions. Due at the end of class.

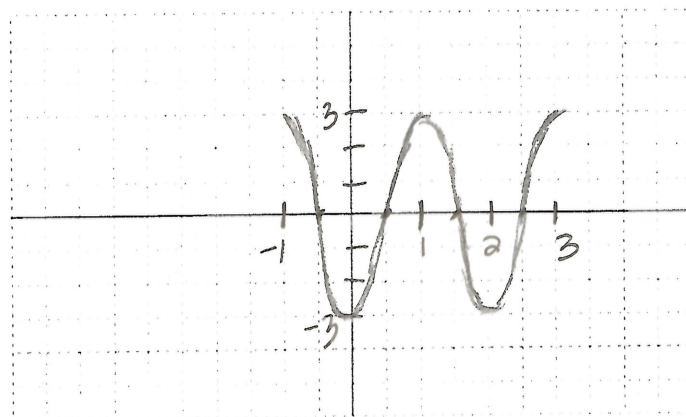
1) $y = 2\sin(2x) \quad -\pi \leq x \leq 2\pi$



$Amp = 2$

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

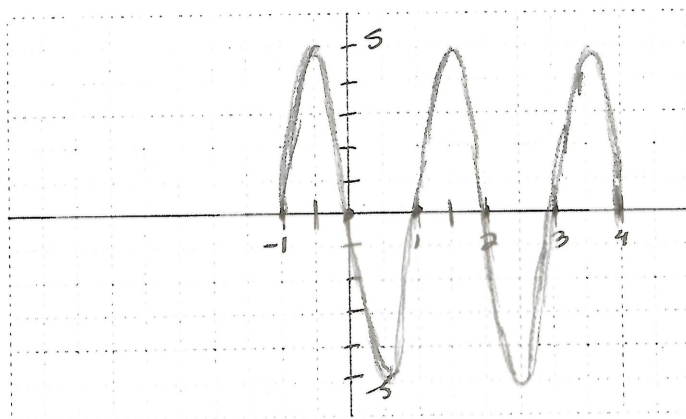
2) $y = -3\cos(\pi x) \quad -1 \leq x \leq 3$



$Amp = 3$ * FLIP *

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

3) $y = 5\cos\left(\pi x + \frac{\pi}{2}\right) \quad -1 \leq x \leq 4$



$Amp = 5$

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

Start

$\pi x + \frac{\pi}{2} = 0$

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

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

End

$\pi x + \frac{\pi}{2} = 2\pi$

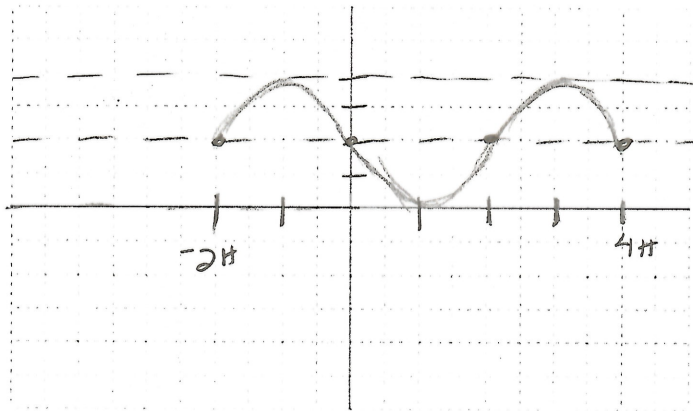
$\frac{-\pi}{\pi} = \frac{-\pi}{\pi}$

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

$x = \frac{3}{2}$ or 1.5

$x = \frac{3}{2}$ or 1.5

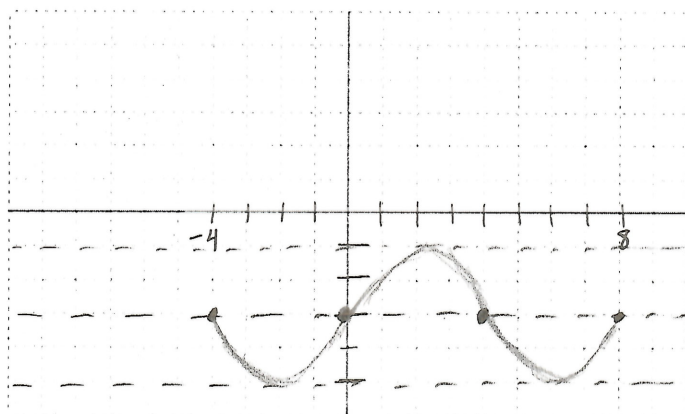
↑2
4) $y = 2 - 2\sin\left(\frac{1}{2}x\right) \quad -2\pi \leq x \leq 4\pi$



Amp = 2 ☆ FLIP ☆

$P = \frac{2\pi}{\frac{1}{2}} = 4\pi$

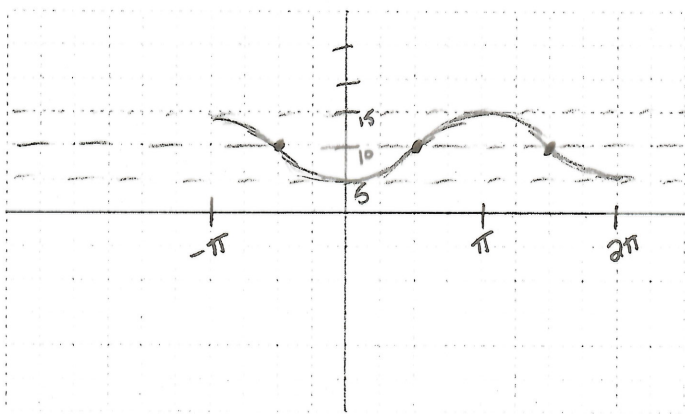
↓3
5) $y = -3 + 2\sin\left(\frac{\pi}{4}x\right) \quad -4 \leq x \leq 8$



Amp = 2

$P = \frac{2\pi}{\frac{\pi}{4}} = \frac{2\pi}{1} \cdot \frac{4}{\pi} = 8$

↑10
6) $y = 10 + 5\cos(x + \pi) \quad -\pi \leq x \leq 2\pi$



Amp = 5

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

Start

$x + \pi = 0$

$x = -\pi$

End

$x + \pi = 2\pi$

$x = \pi$