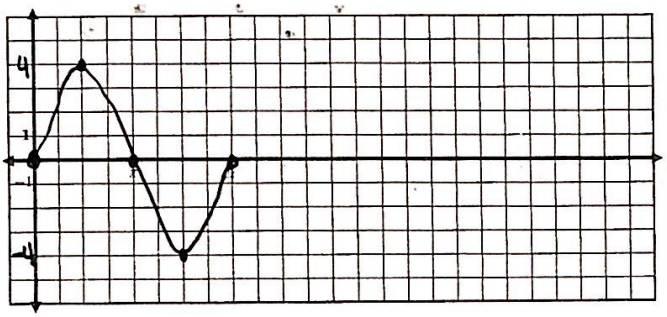
Assignment 2: Graphing Sine and Cosine Functions with Transformations

Name _____

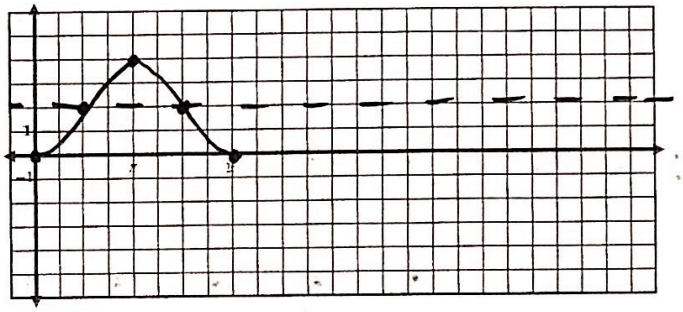
Per _____ Date _____

Indicate each transformation. Then, sketch the graph of each function.

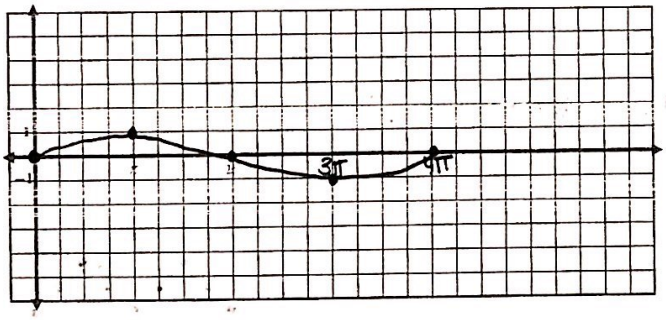
1. $y = 4 \sin x$ Amp = 4 Per = 2π Ph Sh = NONE Ver Sh = NONE



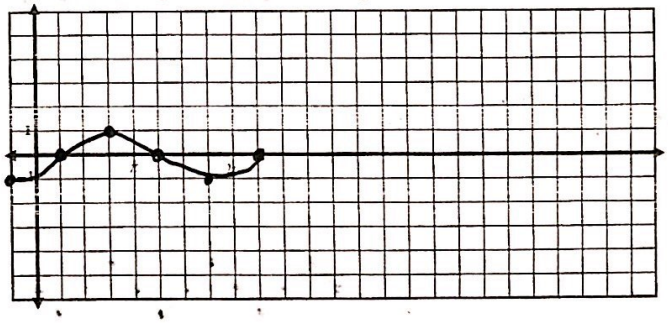
2. $y = -2\cos x + 2$ Amp = 2 Per = 2π Ph Sh = NONE Ver Sh = Up 2



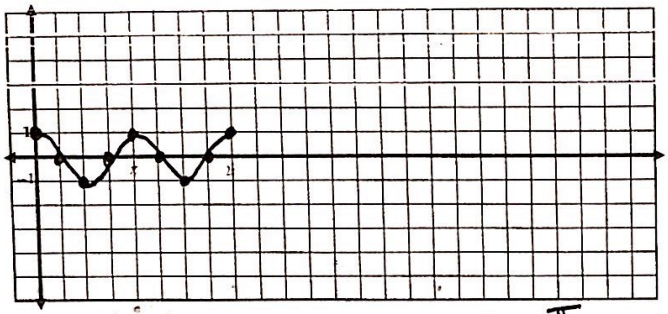
3. $y = \sin\frac{x}{2}$ Amp = 1 Per = 4π Ph Sh = NONE Ver Sh = NONE



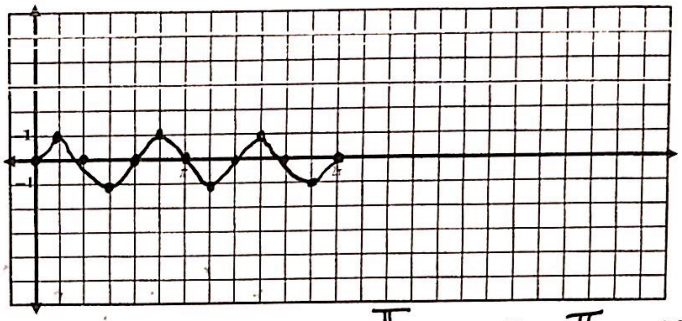
4. $y = \sin\left(x - \frac{\pi}{4}\right)$ Amp = 1 Per = 2π Ph Sh = Right $\pi/4$ Ver Sh = NONE



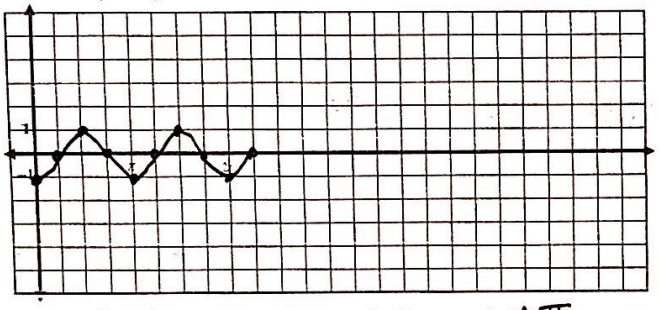
5. $y = \cos(2x)$ Amp = 1 Per = π Ph Sh = NONE Ver Sh = NONE



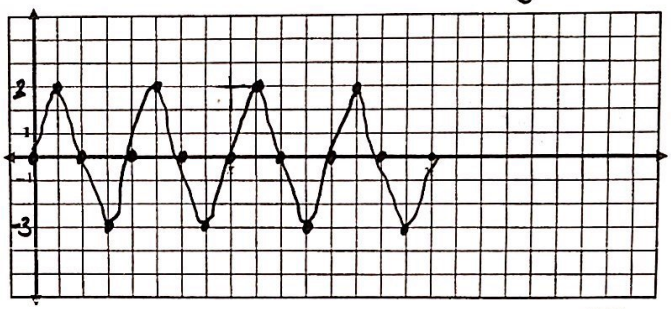
6. $y = \sin(3x)$ Amp = 1 Per = $\frac{2\pi}{3}$ Ph Sh = NONE Ver Sh = NONE



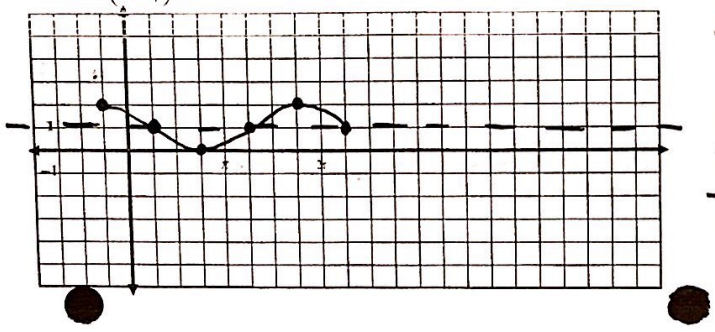
7. $y = \sin 2\left(x - \frac{\pi}{4}\right)$ Amp = 1 Per = π Ph Sh = Right $\frac{\pi}{4}$ Ver Sh = NONE



8. $y = 3\sin 4(x - \pi)$ Amp = 3 Per = $\frac{\pi}{2}$ Ph Sh = Right π Ver Sh = NONE



9. $y = \cos\left(x + \frac{\pi}{4}\right) + 1$ Amp = 1 Per = 2π Ph Sh = Left $\frac{\pi}{4}$ Ver Sh = Up 1



10. $y = 2\sin 2\left(x - \frac{\pi}{2}\right) - 2$ Amp = 2 Per = π Ph Sh = Right $\frac{\pi}{2}$ Ver Sh = Down 2