

**Assignment 3 – Review: Graphing Sin/Cos Trigonometric Functions**

Name \_\_\_\_\_

For the following functions, find a) the amplitude, b) the period, c) the phase shift, d) the vertical shift.

1.  $y = 2 \sin 2\left(x + \frac{\pi}{3}\right) - 7$     a) \_\_\_\_\_    b) \_\_\_\_\_    c) \_\_\_\_\_    d) \_\_\_\_\_

2.  $y = \cos 2\left(x - \frac{\pi}{4}\right) + 3$     a) \_\_\_\_\_    b) \_\_\_\_\_    c) \_\_\_\_\_    d) \_\_\_\_\_

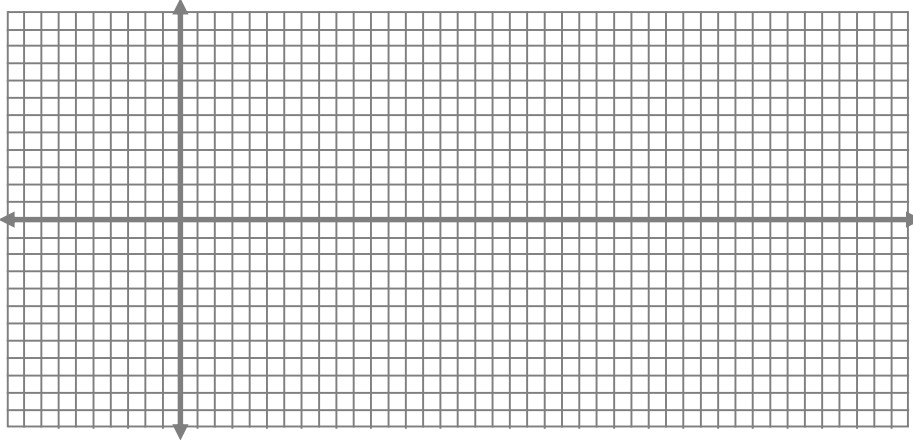
3.  $y = -\sin \frac{1}{2}\left(x - \frac{\pi}{3}\right)$     a) \_\_\_\_\_    b) \_\_\_\_\_    c) \_\_\_\_\_    d) \_\_\_\_\_

4.  $y = 2 \sin(x) - 5$     a) \_\_\_\_\_    b) \_\_\_\_\_    c) \_\_\_\_\_    d) \_\_\_\_\_

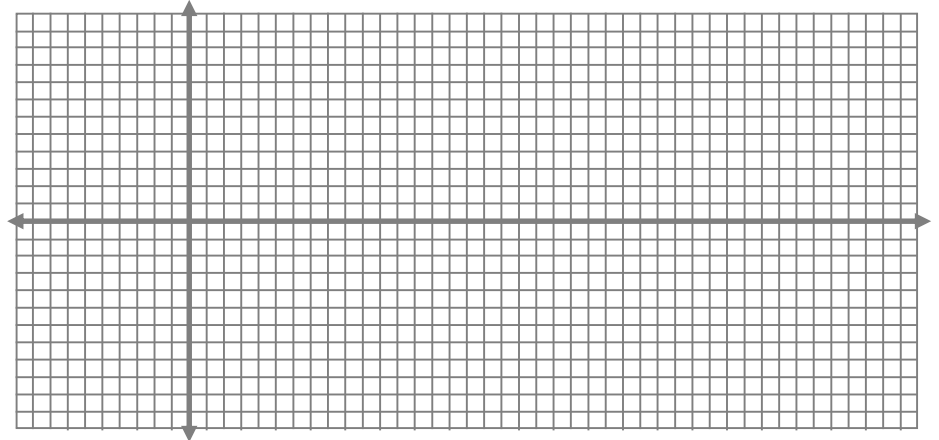
5.  $y = -5 \cos 4\left(x + \frac{\pi}{6}\right) + 2$     a) \_\_\_\_\_    b) \_\_\_\_\_    c) \_\_\_\_\_    d) \_\_\_\_\_

**For each graph, sketch an accurate and complete graph over the domain  $0 \leq x \leq 2\pi$ .**

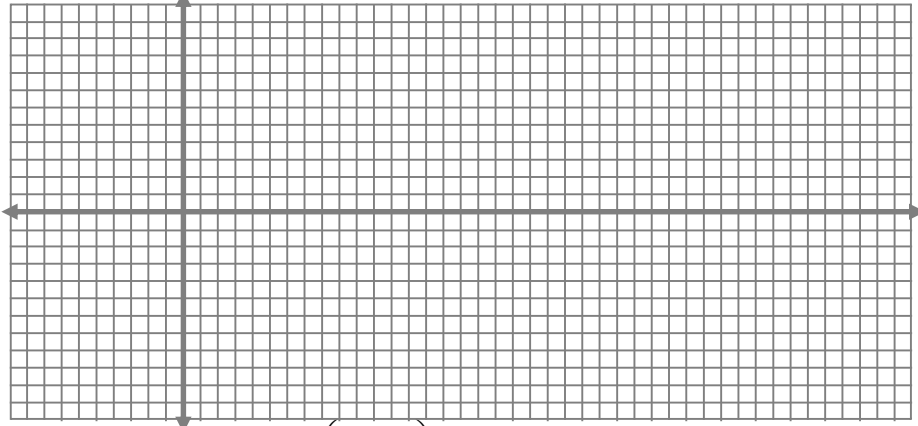
6. Graph:  $y = \sin(x)$



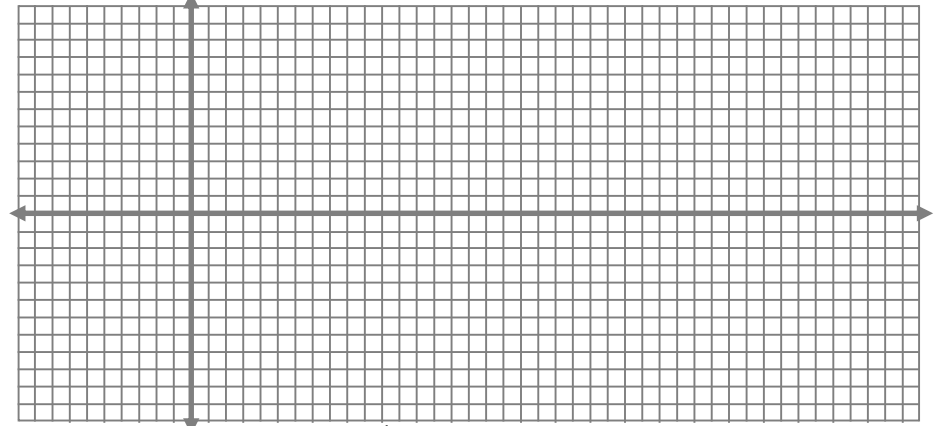
7. Graph:  $y = \cos(x)$



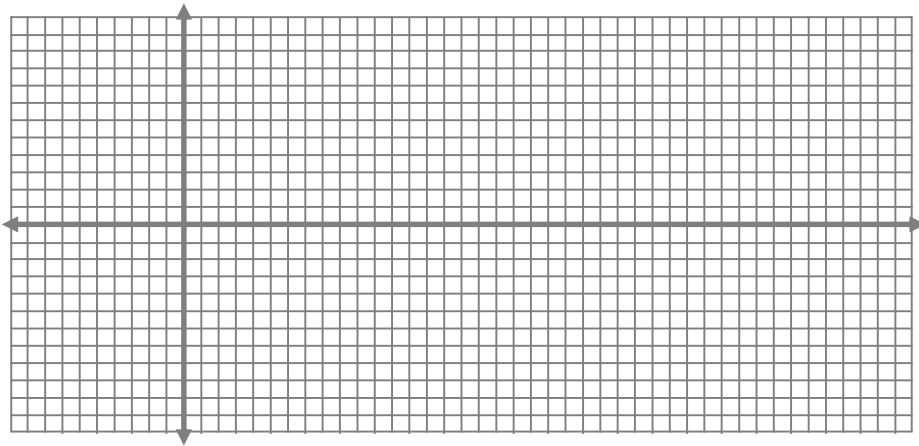
8. Graph:  $y = -\cos 3(x) - 2$



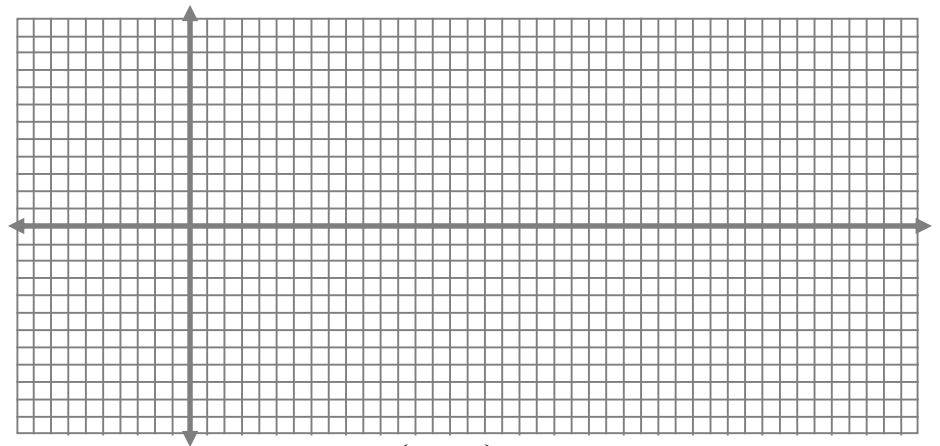
9. Graph:  $y = 4 \sin(x - \pi)$



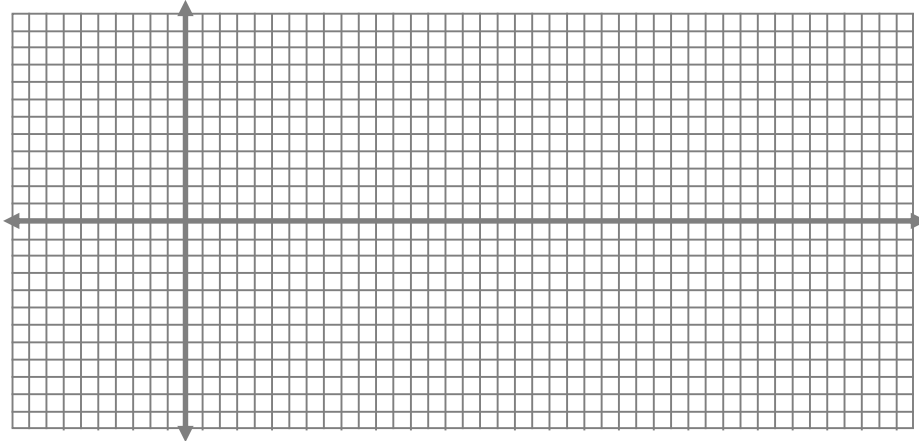
9. Graph:  $y = -2 \sin\left(x - \frac{\pi}{2}\right)$



10. Graph:  $y = 3 \sin\left(\frac{1}{2}(x)\right) + 2$



11. Graph  $y = 3 \cos 2(x - \pi) + 1$



12. Graph:  $y = \cos 2\left(x - \frac{\pi}{3}\right)$

