

Mixed Review: Equations & Graphing of Trig Functions

Determine the amplitude, period, and vertical shift of each function.

1. $y = \sin 4x$

2. $y = \cos 5x - 4$

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

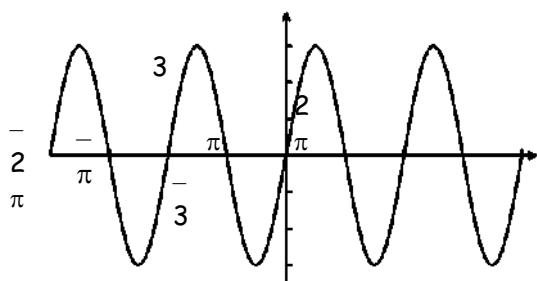
4. $y = -4 \sin 3x + 2$

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

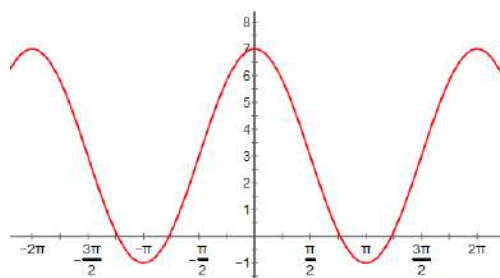
6. $y = 3 \sin \frac{2}{3}x + 1$

Give the amplitude, period, and vertical shift of each function graphed below. Then write an equation of each graph.

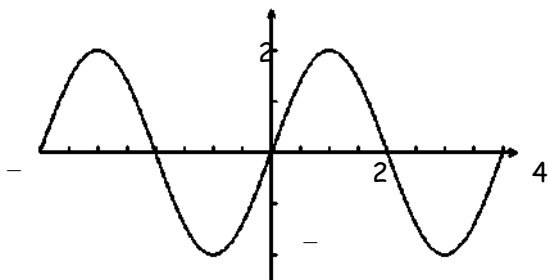
7.



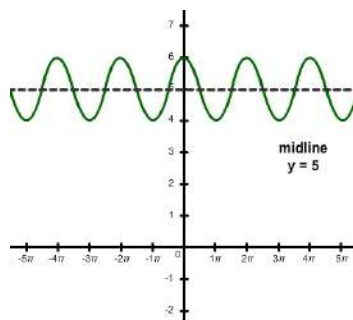
8.



9.

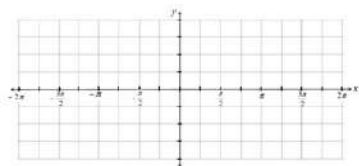


10.

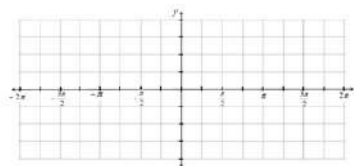


Sketch the graph of the following functions.

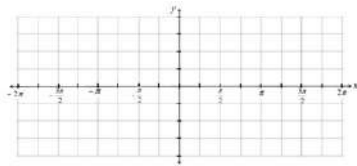
11. $y = 3 \sin x - 1$



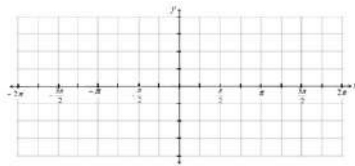
12. $y = 2 \cos x + 2$



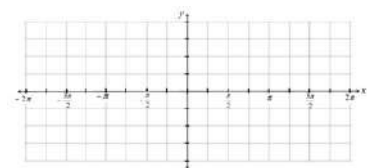
13. $y = 2 \sin 2x + 2$



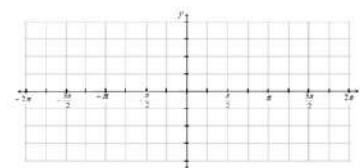
14. $y = -\cos 2x - 1$



15. $y = 3 \cos \frac{1}{2}x$



16. $y = -2 \sin (4x) + 1$



Determine the amplitude, period, phase shift, and vertical shift for each.

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

18. $y = 2 \cos (x - \pi)$

19. $y = \frac{1}{2} \cos 2x - 4$

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

21. $y = 1 + 3 \sin \left(2x - \frac{\pi}{2} \right)$

22. $y = 2 \cos (x + \pi) - 2$

