

Pre-Calculus B
C6L4 Worksheet

State the period and the amplitude.

1. $y = 3 \sin (2x)$

2. $y = 2 \cos (3x)$

3. $y = \frac{5}{2} \cos \frac{x}{2}$

4. $y = -3 \sin \frac{x}{4}$

5. $y = \frac{2}{3} \sin \pi x$

6. $y = \frac{3}{2} \cos \frac{\pi x}{2}$

11. $y = \frac{1}{3} \sin x$

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

13. $y = \sin (3x)$

14. $y = \cos (4x)$

15. $y = \sin \left(\frac{1}{2} x \right)$

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

17. $y = 3 \sin (2x)$

18. $y = 2 \cos (3x)$

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

20. $y = \frac{2}{3} \sin (2x)$

21. $y = 4 \cos \left(\frac{1}{2} x \right)$

State the amplitude and period. Then sketch the graph. Include 2 full periods.

7. $y = -\cos x$

8. $y = -\sin x$

9. $y = 3 \sin x$

10. $y = 2 \cos x$

$$22. y = \sin(x) - 2$$

$$34. y = \sin(x - \pi)$$

$$23. y = \cos(x) - 1$$

$$35. y = \cos\left(x + \frac{\pi}{2}\right)$$

$$24. y = \sin(3x) - 2$$

$$36. y = 3 \sin(x + \pi)$$

$$25. y = \cos(2x) - 1$$

$$37. y = \frac{1}{2} \cos\left(x - \frac{\pi}{4}\right)$$

$$26. y = 2 \sin(x) + 3$$

$$27. y = 3 \cos(x) - 5$$

$$28. y = 2 \sin(3x) - 2$$

$$29. y = 3 \cos(2x) + 4$$

$$30. y = \sin(\pi x)$$

$$31. y = 3 \cos(2\pi x)$$

$$32. y = \sin \frac{\pi x}{4}$$

$$33. y = 3 \cos \frac{\pi x}{2}$$