

Determine the Amplitude and Period – Worksheet

Instructions:

For each trigonometric function below, determine:

- the amplitude
- the period

Give your answers in exact form (use π where needed).

Level 1 – Easy

1. $y = \sin x$

2. $y = \cos x$

3. $y = 2 \sin x$

4. $y = 3 \cos x$

Level 2 – Medium

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

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

7. $y = 2 \sin(4x)$

8. $y = 1/2 \cos(5x)$

9. $y = 4 \sin(1/2 x)$

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

Level 3 – Hard

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

12. $y = 2 \cos(3x + \pi/2)$

13. $y = -\sin(4x - \pi)$

14. $y = -1/2 \cos(6x + \pi)$

15. $y = -2 \cos(8x)$

16. $y = 5/3 \sin(10x)$

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

18. $y = 1/4 \cos(12x + \pi/3)$