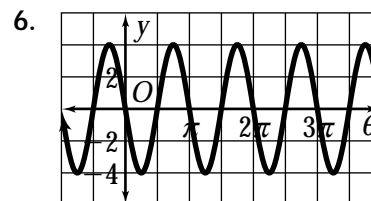
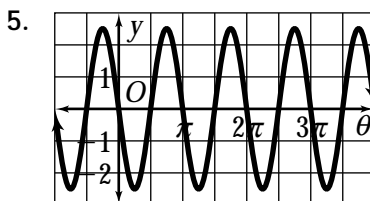
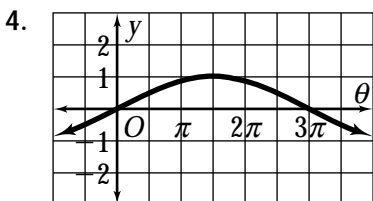
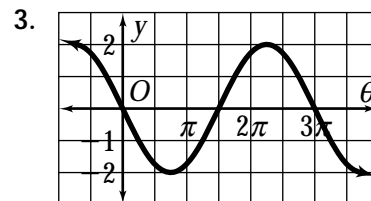
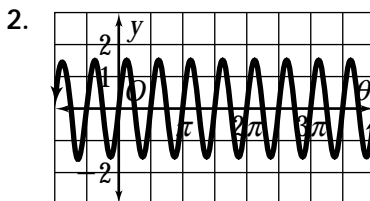
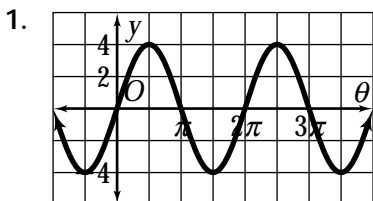


Practice 9-4

Example Exercises

Example 1

Find the amplitude and period of each sine curve. Then write an equation for each curve.



Example 2

Sketch one cycle of each curve.

7. amplitude = 1; period = π

8. amplitude = 3; period = 2π

9. amplitude = 2; period = $\frac{\pi}{2}$

10. amplitude = 2; period = $\frac{\pi}{4}$

11. amplitude = 1.5; period = $\frac{\pi}{3}$

12. amplitude = 2.5; period = 2π

13. amplitude = 3; period = 4π

14. amplitude = 1; period = $\frac{3\pi}{4}$

Example 3

Use a graphing calculator to solve each equation in the interval from 0 to 2π .

15. $2 \sin \theta = 0.25$

16. $3 \sin 2\theta = 0.5$

17. $-2 \sin \frac{\theta}{2} = 1.5$

18. $-3 \sin \frac{\pi}{4} \theta = 0.6$

19. $1.5 \sin \frac{2\pi}{3} \theta = 1$

20. $5 \sin \frac{\pi}{6} \theta = 0.25$