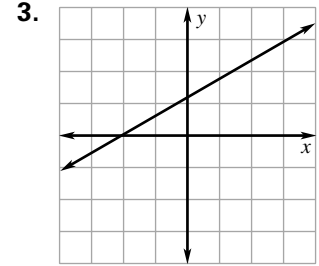
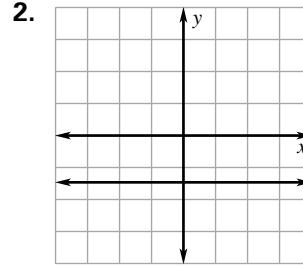
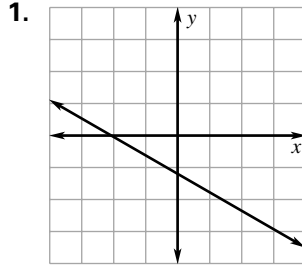


**Practice A**

For use with pages 226–233

State whether the slope of the line is *positive, negative, zero, or undefined*.



Plot the points and draw a line through them. Without calculating, state whether the slope of the line is *positive, negative, zero, or undefined*.

- |                       |                      |                       |
|-----------------------|----------------------|-----------------------|
| 4. (2, 4), (5, 2)     | 5. (2, -5), (2, 4)   | 6. (4, 1), (6, 7)     |
| 7. (-3, 5), (2, 5)    | 8. (1, -4), (-2, 3)  | 9. (-4, 2), (0, 5)    |
| 10. (2, -3), (-4, -3) | 11. (-5, 1), (5, -1) | 12. (-1, 3), (-1, -2) |

Find the slope of the line passing through the given points.

- |                       |                        |                        |
|-----------------------|------------------------|------------------------|
| 13. (1, 5), (2, 9)    | 14. (2, 4), (1, 1)     | 15. (4, 1), (2, 7)     |
| 16. (2, 3), (4, 3)    | 17. (0, 4), (-2, 8)    | 18. (6, -8), (6, 4)    |
| 19. (3, 7), (-9, -5)  | 20. (-2, 3), (4, -1)   | 21. (-5, 2), (2, -4)   |
| 22. (3, -1), (-6, -1) | 23. (-3, -9), (-3, -1) | 24. (-3, -2), (-1, -7) |

Find the value of  $y$  so that the line passing through the two points has the given slope.

- |                                  |  |                                  |
|----------------------------------|--|----------------------------------|
| 25. (1, $y$ ), (2, 4), $m = 1$   | 26. (4, $y$ ), (5, 3), $m = 3$             | 27. (-2, 4), (0, $y$ ), $m = 2$  |
| 28. (3, 5), (1, $y$ ), $m = -2$  | 29. (-2, $y$ ), (0, 3), $m = -\frac{1}{2}$ | 30. (4, -2), (-1, $y$ ), $m = 1$ |
| 31. (1, 5), (10, $y$ ), $m = -4$ | 32. (-3, 6), (-4, $y$ ), $m = 5$           | 33. (-4, 8), (8, $y$ ), $m = -9$ |

In Exercises 34–39, find the rate of change between the two points. Give the units of measure for the rate.

- |   |   |
|---|---|
| 34. (4, 10) and (6, 15); $x$ in minutes, $y$ in miles   | 35. (3, 5) and (11, 69); $x$ in years, $y$ in dollars |
| 36. (7, 21) and (14, 42); $x$ in days, $y$ in gallons   | 37. (1, 2) and (8, 16); $x$ in weeks, $y$ in pounds   |
| 38. (4, 100) and (8, 200); $x$ in gallons, $y$ in miles | 39. (8, 1) and (4, 2); $x$ in months, $y$ in inches   |