

# Practice 6-2

## Slope-Intercept Form

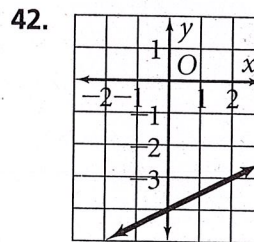
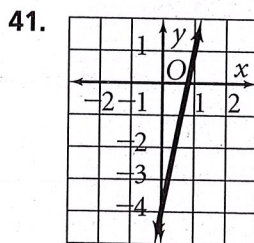
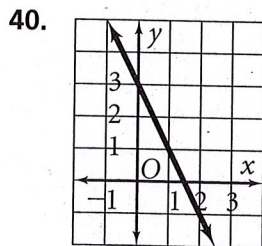
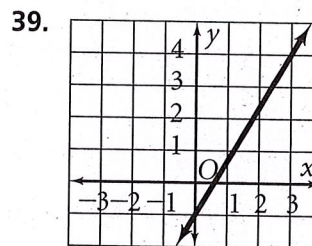
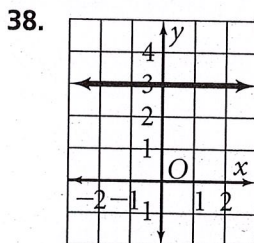
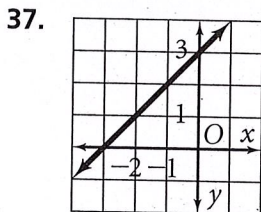
Find the slope and y-intercept of each equation. Then graph.

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|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1. $y = x + 2$              | 2. $y + 3 = -\frac{1}{3}x$  | 3. $y = 2x - 1$             | 4. $y - \frac{3}{5}x = -1$  |
| 5. $y = \frac{1}{2}x - 4$   | 6. $y - 2x = -3$            | 7. $y = \frac{2}{5}x + 3$   | 8. $y + \frac{1}{3}x = -2$  |
| 9. $y = -x - 2$             | 10. $y - 6 = -2x$           | 11. $y = -5x - 2$           | 12. $y + x = 0$             |
| 13. $y + 4 = 2x$            | 14. $y = -5x + 5$           | 15. $y = -4 + x$            | 16. $y = -4x$               |
| 17. $y = \frac{4}{5}x + 2$  | 18. $y - \frac{3}{4}x = -5$ | 19. $y = -6$                | 20. $y - 3 = -\frac{2}{3}x$ |
| 21. $y = -\frac{7}{4}x + 6$ | 22. $y + 3x = 6$            | 23. $y + \frac{1}{5}x = -2$ | 24. $y = \frac{3}{7}x$      |

Write an equation of a line with the given slope and y-intercept.

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|--------------------------------|-----------------------|--------------------------------|
| 25. $m = 4, b = 8$             | 26. $m = -2, b = -6$  | 27. $m = \frac{4}{3}, b = 0$   |
| 28. $m = -\frac{9}{5}, b = -7$ | 29. $m = -6, b = 1$   | 30. $m = \frac{3}{7}, b = -1$  |
| 31. $m = -\frac{1}{5}, b = -3$ | 32. $m = 9, b = 4$    | 33. $m = -8, b = 11$           |
| 34. $m = \frac{2}{9}, b = 0$   | 35. $m = -11, b = 13$ | 36. $m = -\frac{7}{2}, b = -6$ |

Write the slope-intercept form of the equation for each line.



43. A television production company charges a basic fee of \$4000 and then \$2000 per hour when filming a commercial.
- Write an equation in slope-intercept form relating the basic fee and per-hour charge.
  - Graph your equation.
  - Use your graph to find the production costs if 4 hours of filming were needed.