

Extra Practice

Lesson 7-1

(pages 369–374)

Graph each system of equations. Then determine whether the system has *no* solution, *one* solution, or *infinitely many* solutions. If the system has one solution, name it. **1–15.** See pp. 852A–852H for graphs.

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|--|---|--|
| 1. $y = 3x$
$4x + 2y = 30$ (3, 9) | 2. $x = -2y$
$x + y = 1$ (2, -1) | 3. $y = x + 4$
$3x + 2y = 18$ (2, 6) |
| 4. $x + y = 6$
$x - y = 2$ (4, 2) | 5. $x + y = 6$
$3x + 3y = 3$ no solution | 6. $y = -3x$
$4x + y = 2$ (2, -6) |
| 7. $2x + y = 8$
$x - y = 4$ (4, 0) | 8. $\frac{1}{5}x - y = \frac{12}{5}$
$3x - 5y = 6$ (-3, -3) | 9. $x + 2y = 0$
$y + 3 = -x$ (-6, 3) |
| 10. $x + 2y = -9$
$x - y = 6$ (1, -5) | 11. $x + \frac{1}{2}y = 3$
$y = 3x - 4$ (2, 2) | 12. $\frac{2}{3}x + \frac{1}{2}y = 2$
$4x + 3y = 12$ infinitely many |
| 13. $y = x - 4$
$x + \frac{1}{2}y = \frac{5}{2}$ (3, -1) | 14. $2x + y = 3$
$4x + 2y = 6$ infinitely many | 15. $12x - y = -21$
$\frac{1}{2}x + \frac{2}{3}y = -3$ (-2, -3) |



