

## Practice 6-3

### ..... Example Exercises

#### Example 1

Solve each system using elimination. Check your solution.

- |                                     |                                      |  |
|-------------------------------------|--------------------------------------|--|
| 1. $x + y = 3$<br>$x - y = 1$       | 2. $x + y = 8$<br>$x - y = 10$       | 3. $2x + y = 7$<br>$3x - y = 3$        |
| 4. $x + 3y = 9$<br>$x - 3y = -3$    | 5. $5x + y = 16$<br>$-5x + 3y = 8$   | 6. $5x - 4y = -21$<br>$-2x + 4y = 18$  |
| 7. $4x + 8y = 18$<br>$-4x + 5y = 8$ | 8. $2x + 7y = 31$<br>$5x - 7y = -45$ | 9. $3x + 6y = 11$<br>$5x - 6y = 13$    |
| 10. $9x + y = 3$<br>$-9x + 3y = 9$  | 11. $x - 6y = 2$<br>$6x + 6y = 12$   | 12. $12x - 5y = -7$<br>$-10x + 5y = 5$ |

#### Example 2

Solve each system using elimination. Check your solution.

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|---------------------------------------|---------------------------------------|---|
| 13. $2x + y = 5$<br>$x + y = 4$       | 14. $5x + y = 27$<br>$3x + y = 17$    | 15. $x + 6y = 20$<br>$x + 2y = 12$      |
| 16. $3x + 4y = 1$<br>$2x + 4y = -2$   | 17. $6x + 10y = 54$<br>$6x + 7y = 36$ | 18. $8x + 13y = -8$<br>$8x + 15y = -56$ |
| 19. $11x + 2y = 44$<br>$8x + 2y = 32$ | 20. $7x + 16y = 9$<br>$10x + 16y = 6$ | 21. $12x + 7y = 68$<br>$12x + 6y = 72$  |
| 22. $5x - 9y = 22$<br>$3x - 9y = 6$   | 23. $-3x + 5y = -1$<br>$2x + 5y = 4$  | 24. $8x - 2y = 0$<br>$4x - 2y = -1$     |

#### Example 3

Solve each system using elimination. Check your solution.

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|---------------------------------------|---|--------------------------------------|
| 25. $2x + 5y = 34$<br>$x + 2y = 14$   | 26. $2x - y = 5$<br>$5x + 2y = 17$      | 27. $-2x + 5y = 9$<br>$x + y = 13$   |
| 28. $5x - 2y = 24$<br>$x + 2y = 12$   | 29. $6x + 3y = 33$<br>$4x + y = 15$     | 30. $12x - 9y = 45$<br>$2x + 3y = 3$ |
| 31. $2x + 2y = 8$<br>$3x + 2y = 12$   | 32. $4x - 3y = 17$<br>$5x + 4y = 60$    | 33. $8x + 5y = 6$<br>$3x - 2y = 10$  |
| 34. $-3x + 8y = 10$<br>$5x + 6y = 80$ | 35. $4x + 12y = -24$<br>$3x - 6y = -18$ | 36. $5x - 6y = 48$<br>$2x + 5y = -3$ |