

## Chapter 7 answers

### 7.1

- |                        |             |             |                 |                 |             |
|------------------------|-------------|-------------|-----------------|-----------------|-------------|
| 1. No                  | 3. No       | 5. Yes      | 7. No           | 9. Yes          | 11. Yes     |
| 13. (2, 1)             | 15. (4, 3)  | 17. (1, 2)  | 19. (-4, 3)     | 21. No Solution |             |
| 23. Infinite Solutions |             | 25. (3, -2) | 27. (2, 3)      | 29. (0, -2)     |             |
| 31. (-3, -6)           | 33. (0, -3) | 35. (7, -2) | 37. No Solution |                 | 39. (-3, 2) |
| 41. Infinite Solutions |             | 43. (2, 0)  | 45. No Solution |                 |             |

### 7.2

- |                        |                                   |                                    |                                       |              |                 |
|------------------------|-----------------------------------|------------------------------------|---------------------------------------|--------------|-----------------|
| 1. (-4, 5)             | 3. (-7, -4)                       | 5. (-2, -5)                        | 7. (-9, 4)                            | 9. (2, 4)    | 11. No Solution |
| 13. (0, 4)             | 15. Infinite Solutions            |                                    | 17. (3, 7)                            | 19. (7, -4)  | 21. (4, -9)     |
| 23. (1, 8)             | 25. (1, -3)                       | 27. $(-6, -\frac{4}{5})$           | 29. $(-\frac{7}{2}, 3)$               | 31. (-9, -5) |                 |
| 33. Infinite Solutions |                                   | 35. No Solution                    |                                       | 37. (6, 2)   | 39. (-5, 3)     |
| 41. (2, -7)            | 43. $(-\frac{2}{5}, \frac{1}{4})$ | 45. $(-\frac{3}{2}, -\frac{2}{3})$ | 47. $(-\frac{60}{13}, \frac{60}{13})$ | 49. (3, -2)  |                 |

### 7.3

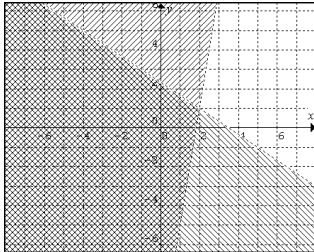
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|---------------------------------------|-------------|-------------------------|-----------------|-------------------------|--------------------------|
| 1. (-2, 6)                            | 3. (-4, -1) | 5. (-3, 7)              | 9. (-5, 1)      | 11. (7, -3)             | 13. (9, -3)              |
| 15. (-8, 3)                           | 17. (5, -2) | 19. No Solution         |                 | 21. Infinite Solutions  |                          |
| 23. (5, -6)                           | 25. (3, 0)  | 27. $(-\frac{1}{3}, 5)$ | 29. (2, -6)     | 31. $(\frac{5}{4}, -3)$ | 33. $(-2, -\frac{2}{3})$ |
| 35. (3, -2)                           | 37. (1, -5) | 39. Infinite Solutions  |                 | 41. No Solution         |                          |
| 43. $(-\frac{60}{13}, \frac{60}{13})$ | 45. (3, -2) | 47. (3, 1)              | 49. No Solution | 51. Infinite Solutions  |                          |
| 53. $(-3, -\frac{2}{5})$              | 55. (8, 3)  |                         |                 |                         |                          |

### 7.4

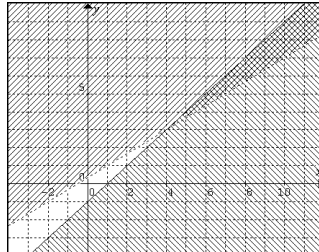
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|--|--|-----------------------|
| 1. 7 apple fritters  | 3. 40 fluorescent bulbs                | 5. \$1.75 for popcorn |
| 7. 21 nickels, 13 quarters   | 9. 15 Snickers, 12 Licorice Whips      | 11. \$12 for pizza    |
| 13. \$2 for pencils, \$0.75 for paper                                  | 15. 7 short answer, 13 true/false      |                       |
| 17. 19 point after's, 28 field goals                                   | 19. 4 birdies, 5 bogeys                |                       |
| 21. 1200 lbs of 8%, 600 lbs of 20%                                     | 23. 20 L of 30%, 10 L of 60%           |                       |
| 25. 6.25 grams of 90%, 18.75 grams of 70%                              | 27. 80 ml of 40%, 10 ml of 58%         |                       |
| 29. 2.2 cups of rum, 1.8 cups of Coke                                  | 31. 300 lbs of 10%, 200 lbs of 60%     |                       |
| 33. 75 ounces of 25%, 25 ounces of 77%                                 | 35. 10 grams of 10% gold               |                       |
| 37. 18.75 lbs of 12%, 31.25 lbs of 20%                                 | 39. 857.1 L of 5.5%, 1142.9 L of 2%    |                       |
| 41. 17 miles per hour  | 43. 3 hours                            | 45. Jon               |
| 47. Shawn swims 4 mph, river current is 1 mph                          | 49. 10 mph for plane, 2 mph for wind   |                       |
| 51. 18 mph for boat, 2 mph for current                                 | 53. 16 mph for boat, 4 mph for current |                       |
| 55. 24 kilometers per hour for boat, 4 kilometers per hour for current |  |                       |
| 57. 340 mph for the plane  | 59. 140 mph for plane, 30 mph for wind |                       |

### 7.5

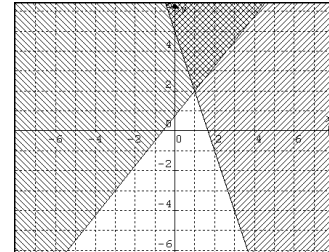
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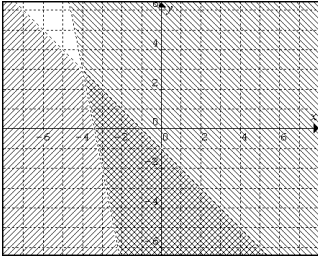
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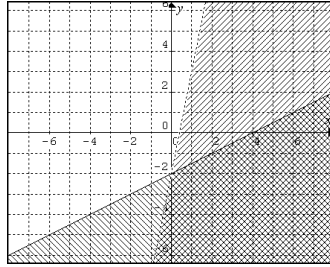
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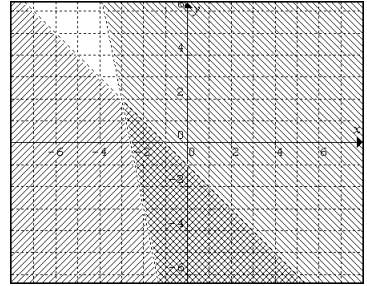
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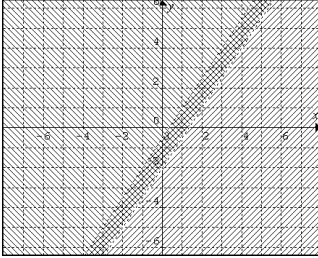
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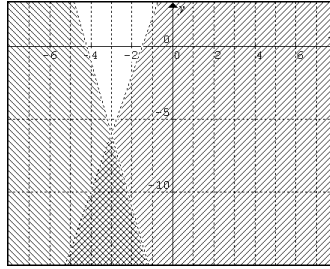
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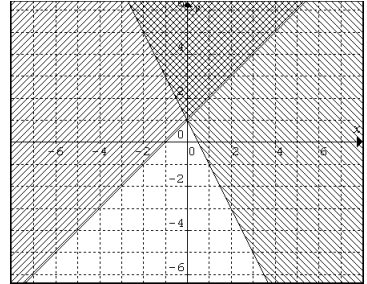
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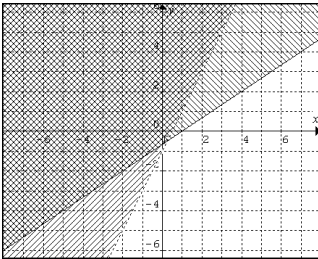
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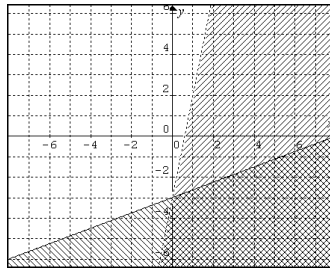
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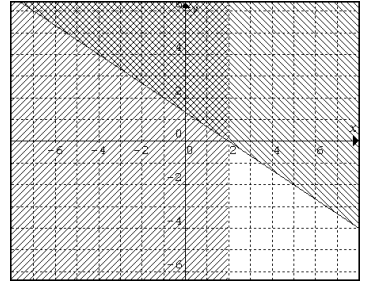
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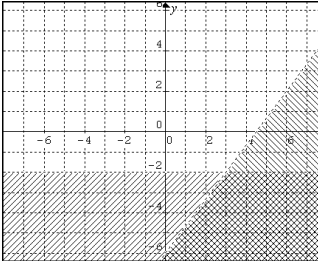
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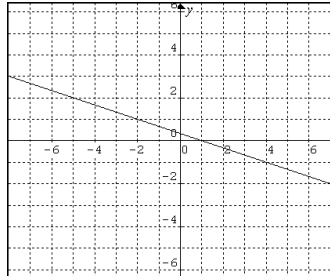
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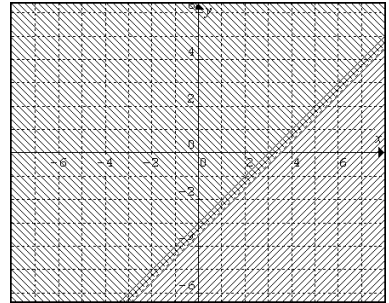
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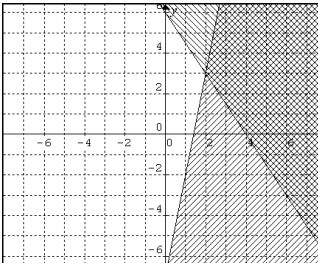
23.



33.



15.



25.

