

Chapter 2 answers

2.1

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|-----------------------|-------------------------|------------------------|--------------------|------------------------|------------|
| 1. No | 3. Yes | 5. Yes | 7. No | 9. Yes | 11. {18} |
| 13. {26} | 15. {21} | 17. {45} | 19. {6} | 21. {4} | 23. {3} |
| 25. {2} | 27. {69} | 29. {-5} | 31. {18} | 33. {7} | 35. {0} |
| 37. {3} | 39. {-3} | 41. $\{-\frac{3}{2}\}$ | 43. {0} | 45. {-8} | 47. {-40} |
| 49. $\{\frac{5}{3}\}$ | 51. $\{-\frac{28}{9}\}$ | 53. {2} | 55. {-3} | 57. $\{\frac{1}{2}\}$ | 59. {5} |
| 61. {2} | 63. $\{-\frac{11}{3}\}$ | 65. {6} | 67. {-4} | 69. $\{\frac{23}{6}\}$ | 71. 27 |
| 73. 150 | 75. 46.2% | 77. 14.3 | 79. 25 | 81. 1500% | 83. 222.87 |
| 85. 8 | 87. \$11.88 | 89. 215 iphones | 91. 24,000 runners | | |
| 93. 3400 people | 95. 4% increase | 97. 65% markup | 99. 660 people | | |


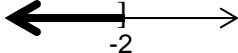
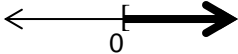
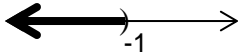
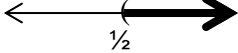
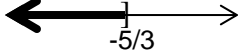
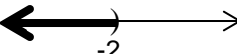
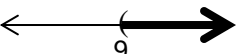
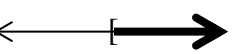
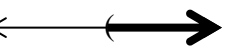
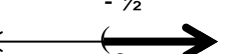
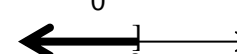
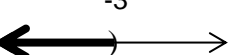
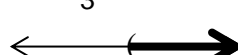
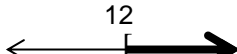
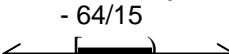
2.2

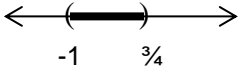
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|-------------------------|------------------------|-----------------------|--------------------------|-------------------------|-------------------------|
| 1. {7} | 3. {2} | 5. $\{\frac{16}{5}\}$ | 7. $\{\frac{6}{5}\}$ | 9. {-2} | 11. {-3} |
| 13. {-3} | 15. {4} | 17. {3} | 19. {-4} | 21. $\{\frac{27}{17}\}$ | 23. $\{\frac{25}{3}\}$ |
| 25. {3} | 27. $\{\frac{19}{8}\}$ | 29. {3} | 31. {1} | 33. {1} | 35. {1} |
| 37. $\{-\frac{5}{7}\}$ | 39. {2} | 41. {2} | 43. $\{-\frac{18}{17}\}$ | 45. $\{\frac{1}{2}\}$ | 47. {0} |
| 49. {0} | 51. $\{\frac{44}{9}\}$ | 53. {-20} | 55. {-3} | 57. {0} | 59. $\{-\frac{5}{32}\}$ |
| 61. $\{-\frac{8}{31}\}$ | 63. {40} | 65. {1300} | 67. {7000} | | |

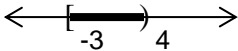
2.3

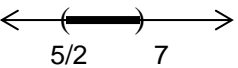
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|------------------------------------|------------------------------------|------------------|---------------------------|
| 1. 8 ft by 10 ft | 3. 12 cm by 19 cm | 5. 9 cm by 16 cm | 7. 18 m by 36 m |
| 9. 52 inches | 11. 14 inches | 13. 31 feet | 15. 8 in., 13 in., 15 in. |
| 17. $30^\circ, 60^\circ, 90^\circ$ | 19. $45^\circ, 60^\circ, 75^\circ$ | 21. 13, 14, 15 | 23. 15, 17, 19 |
| 25. 21, 22, 23 | 27. 3 hours | 29. 3 hours | 31. 5 L/min |
| 33. 16 hours | 35. 160 hours | 37. 49 women | 39. \$42,540 |
| 41. \$100,000 | 43. 22.2 gallons | 45. 11.5 seconds | 47. -40° |
| 49. 2500 units | 51. \$1,800 | 53. 24% | |

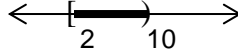
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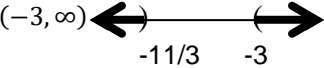
- | | |
|--|---|
| 1.  | 3.  |
| 5.  | 7.  |
| 9.  | 11.  |
| 13. $(-\infty, -2)$  | 15. $(9, \infty)$  |
| 17. $[-\frac{1}{2}, \infty)$  | 19. $(0, \infty)$  |
| 21. $(-3, \infty)$  | 23. $(-\infty, 3]$  |
| 25. $(-\infty, 12)$  | 27. $(-\frac{64}{15}, \infty)$  |
| 29. $[0, \infty)$  | 31. $[-3, 3)$  |

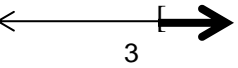
33. $(-1, \frac{3}{4})$ 

37. $[-3, 4)$ 

41. $(\frac{5}{2}, 7)$ 


45. $[2, 10)$ 

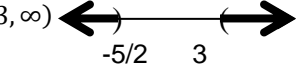
49. $(-\infty, -\frac{11}{3}) \cup (-3, \infty)$ 

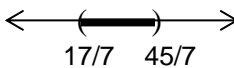
53. $[3, \infty)$ 

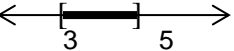
57. $(-\infty, \infty)$ 

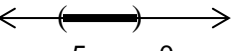
61. $(-\infty, 1)$ 

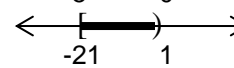
65. $[-4, 1)$ 

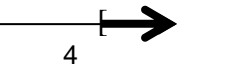
69. $(-\infty, -\frac{5}{2}) \cup (3, \infty)$ 

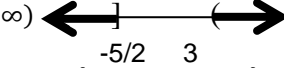
35. $(\frac{17}{7}, \frac{45}{7})$ 

39. $[3, 5]$ 

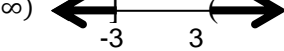
43. $(-5, 0)$ 


47. $[-21, 1)$ 

51. $[4, \infty)$ 

55. $(-\infty, -\frac{5}{2}] \cup (3, \infty)$ 

59. $(-\infty, \infty)$ 

63. $(-\infty, -3] \cup (3, \infty)$ 

67. $(4, \infty)$ 

2.5 Graphs omitted

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|---------------------------------------|---|--|----------------------------------|---------------------|------------------|
| 1. $\{-2, 2\}$ | 3. $\{-7, 7\}$ | 5. $\{-5, 1\}$ | 7. $\{-2, 8\}$ | 9. $\{-2, 0\}$ | 11. $\{1/2\}$ |
| 13. No Solution | | 15. $\{-1, -1/3\}$ | 17. $\{-2/5, 8/5\}$ | 19. $\{0, 2/5\}$ | 21. $\{-3, 11\}$ |
| 23. $\{1/2, 5/2\}$ | 25. $\{-1\}$ | 27. No solution | | 29. $\{-1/3, 5/3\}$ | |
| 31. $(-\infty, -3) \cup (3, \infty)$ | 33. $[-4, 4]$ | 35. $(-\infty, -3] \cup [1, \infty)$ | 37. $(4, 6)$ | | |
| 39. $(-\infty, -4] \cup [8, \infty)$ | 41. $(-4, 3)$ | 43. $(-\infty, -2] \cup [14/5, \infty)$ | 45. No Solution | | |
| 47. $(-\infty, 0) \cup (1, \infty)$ | 49. $(-\frac{1}{2}, \frac{3}{2})$ | 51. $(-\infty, -3] \cup [9, \infty)$ | 53. $(-\infty, \infty)$ | | |
| 55. No Solution | 57. $(-\infty, \frac{1}{2}) \cup (\frac{1}{2}, \infty)$ | 59. $\{-1/3\}$ | 61. $(\frac{3}{2}, \frac{5}{2})$ | | |
| 63. $(-\infty, -5) \cup (12, \infty)$ | 65. $(-2, \frac{20}{7})$ | 67. $(-\infty, -\frac{5}{4}] \cup [\frac{1}{4}, \infty)$ | 69. $[2, 6]$ | | |
| 71. $(0, 2)$ | 73. $(-\infty, \frac{1}{5}) \cup [\frac{3}{5}, \infty)$ | 75. $(-\infty, 2) \cup (3, \infty)$ | 77. $[1, 3]$ | | |