Chapter 2 answers

2.1

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. $\left\{-\frac{3}{2}\right\}$	43. $\{0\}$	45. $\{-8\}$	47. $\{-40\}$
49. $\left\{\frac{5}{3}\right\}$	51. $\left\{-\frac{28}{9}\right\}$	53. $\{2\}$	55. $\{-3\}$	57. $\left\{\frac{1}{2}\right\}$	59. $\{5\}$
61. $\{2\}$	63. $\left\{-\frac{11}{3}\right\}$	65. $\{6\}$	67. $\{-4\}$	69. $\left\{\frac{23}{6}\right\}$	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		

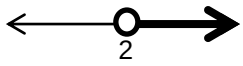
2.2

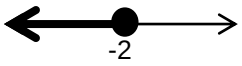
1. {7}	3. {2}	5. $\left\{\frac{16}{5}\right\}$	7. $\left\{\frac{6}{5}\right\}$	9. {-2}	11. $\{-3\}$
13. $\{-3\}$	15. $\{4\}$	17. $\{3\}$	19. $\{-4\}$	21. $\left\{\frac{27}{17}\right\}$	23. $\left\{\frac{25}{3}\right\}$
25. $\{3\}$	27. $\left\{\frac{19}{8}\right\}$	29. $\{3\}$	31. $\{1\}$	33. $\{1\}$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

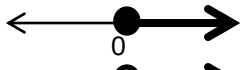
2.3

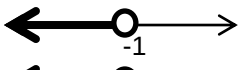
1. 8 ft by 10 ft	3. 12 cm by 19 cm	5. 9 cm by 16 cm	7. 18 m by 36 m
9. 52 inches	11. 14 inches	13. 31 feet	15. 8 in., 13 in., 15 in.
17. 30^0, 60^0, 90^0	19. 45^0, 60^0, 75^0	21. 13, 14, 15	23. 15, 17, 19
25. 21, 22, 23	27. 3 hours	29. 3 hours	31. 5 L/min
33. 16 hours	35. 160 hours	37. 49 women	39. $42,540
41. $100,000	43. 22.2 gallons	45. 11.5 seconds	47. -40^0
49. 2500 units	51. $1,800	53. 24%	

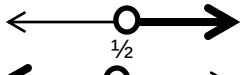
2.4

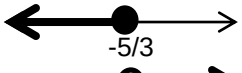
1. 

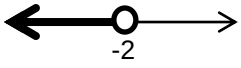
3. 

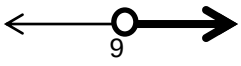
5. 

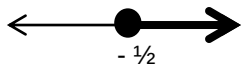
7. 

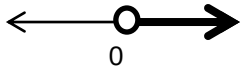
9. 

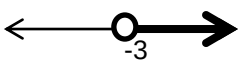
11. 

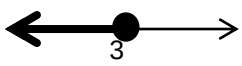
13. x<-2 

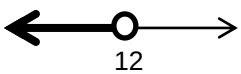
15. x>-9 

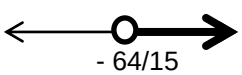
17. $x \geq -\frac{1}{2}$ 

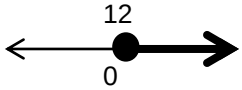
19. x>0 

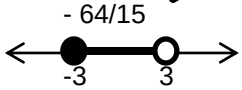
21. x>-3 

23. $x \leq 3$ 

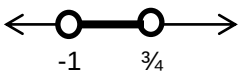
25. x<12 

27. $x > -\frac{64}{15}$ 

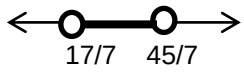
29. $x \geq 0$ 

31. $-3 \leq x < 3$ 

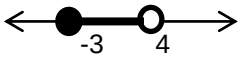
33. $-1 < x < \frac{3}{4}$



35. $\frac{17}{7} < x < \frac{45}{7}$

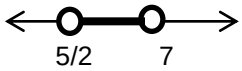


37. $-3 \leq x < 4$

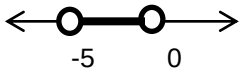


39. $3 \leq x \leq 5$

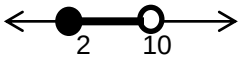
41. $\frac{5}{2} < x < 7$



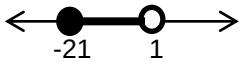
43. $0 > x > -5$



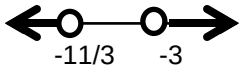
45. $10 > x \geq 2$



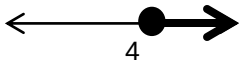
47. $1 > x \geq -21$



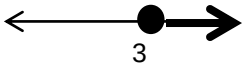
49. $x < -\frac{11}{3}$ or $x > -3$



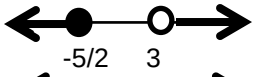
51. $x \geq 4$



53. $x \geq 3$



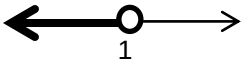
55. $x \leq -\frac{5}{2}$ or $x > 3$



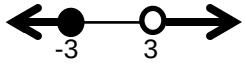
57. all real numbers

59. all real numbers

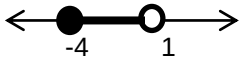
61. x<1



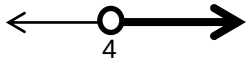
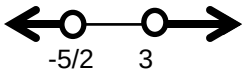
63. $x \leq -3$ or $x > 3$



65. $-4 \leq x < 1$



67. x>4



69. $x < -\frac{5}{2}$ or $x > 3$