

Chapter 5

Chapter 5 Vocabulary Check 1. ratio 2. proportion 3. unit rate 4. proportion 5. rate 6. cross products 7. equal 8. not equal 9. of 10. is
 11. Percent 12. Compound interest 13. $\frac{\text{amount}}{\text{base}}$ 14. 100% 15. 0.01 16. $\frac{1}{100}$ 17. base; amount 18. Percent of decrease 19. Percent of increase
 20. Sales tax 21. Total price 22. Commission 23. Amount of discount 24. Sale price

Chapter 5 Review

1. $\frac{23}{37}$ 2. $\frac{5}{4}$ 3. $\frac{11}{13}$ 4. $\frac{17}{35}$ 5. a. 9 b. $\frac{9}{25}$ 6. a. 3 b. $\frac{3}{25}$ 7. $\frac{3 \text{ professors}}{10 \text{ assistants}}$ 8. $\frac{5 \text{ pages}}{2 \text{ min}}$ 9. 52 mi/hr 10. 15 ft/sec 11. no
 12. yes 13. 15 14. 32.5 15. 60 16. 0.94 17. no 18. 79 gal 19. \$54,600 20. \$1023.50 21. 37% 22. 77% 23. 0.83 24. 0.75 25. 0.005
 26. 0.007 27. 2.00 or 2 28. 4.00 or 4 29. 0.2625 30. 0.8534 31. 260% 32. 5.5% 33. 35% 34. 102% 35. 71% 36. 65% 37. 400%
 38. 900% 39. $\frac{1}{100}$ 40. $\frac{1}{10}$ 41. $\frac{1}{4}$ 42. $\frac{17}{200}$ 43. $\frac{51}{500}$ 44. $\frac{1}{6}$ 45. $\frac{1}{3}$ 46. $1\frac{1}{10}$ 47. 20% 48. 70% 49. $83\frac{1}{3}\%$ 50. $166\frac{2}{3}\%$ 51. 125%
 52. 60% 53. 6.25% 54. 62.5% 55. 100,000 56. 8000 57. 23% 58. 114.5 59. 3000 60. 150% 61. 418 62. 300 63. 64.8 64. 180%
 65. 110% 66. 165 67. 66% 68. 16% 69. 20.9% 70. 106.25% 71. \$206,400 72. \$13.23 73. \$263.75 74. \$1.15 75. \$5000 76. \$300.38
 77. discount: \$900; sale price: \$2100 78. discount: \$9; sale price: \$81 79. \$160 80. \$325 81. \$30,104.61 82. \$17,506.54 83. \$80.61
 84. \$32,830.10 85. 1.6 86. 84 87. 0.038 88. 0.245 89. 0.009 90. 54% 91. 9520% 92. 30% 93. $\frac{47}{100}$ 94. $\frac{8}{125}$ 95. $\frac{7}{125}$ 96. $37\frac{1}{2}\%$
 97. $15\frac{5}{13}\%$ 98. 120% 99. 268.75 100. 110% 101. 708.48 102. 134% 103. 300% 104. 38.4 105. 560 106. 325% 107. 26%
 108. \$6786.50 109. \$617.70 110. \$3.45 111. 12.5% 112. \$1491 113. \$11,687.50

Cumulative Review

1. 206 cases; 12 cans; yes (Sec. 1.8, Ex. 2) 2. 31,084 3. a. $4\frac{2}{7}$ b. $1\frac{1}{15}$ c. 14 (Sec. 2.1, Ex. 18) 4. a. $\frac{19}{7}$ b. $\frac{101}{10}$ c. $\frac{43}{8}$
 5. $2 \cdot 2 \cdot 2 \cdot 2 \cdot 5$ or $2^4 \cdot 5$ (Sec. 2.2, Ex. 7) 6. 119 sq mi 7. $\frac{10}{27}$ (Sec. 2.3, Ex. 3) 8. 44 9. $\frac{23}{56}$ (Sec. 2.4, Ex. 4) 10. 76,500 11. $\frac{8}{11}$ (Sec. 2.5, Ex. 2)
 12. $\frac{15}{4}$ or $3\frac{3}{4}$ 13. $\frac{4}{5}$ in. (Sec. 3.1, Ex. 6) 14. 50 15. 60 (Sec. 3.2, Ex. 4) 16. $\frac{1}{3}$ 17. $\frac{2}{3}$ (Sec. 3.3, Ex. 1) 18. 340 19. $3\frac{5}{14}$ (Sec. 3.4, Ex. 5) 20. 33
 21. $\frac{7}{16}$ (Sec. 3.5, Ex. 6) 22. $33\frac{27}{40}$ 23. $\frac{2}{33}$ (Sec. 3.5, Ex. 8) 24. $\frac{51}{8}$ or $6\frac{3}{8}$ 25. 0.8 (Sec. 4.1, Ex. 13) 26. 0.09 27. 8.7 (Sec. 4.1, Ex. 14) 28. 0.0048
 29. \$3.18 (Sec. 4.2, Ex. 7) 30. 27.94 31. 829.6561 (Sec. 4.3, Ex. 2) 32. 1248.3 33. 18.408 (Sec. 4.4, Ex. 1) 34. 76,300 35. 0.7861 (Sec. 4.5, Ex. 8)
 36. 1.276 37. 0.012 (Sec. 4.5, Ex. 9) 38. 50.65 39. 7.236 (Sec. 4.5, Ex. 11) 40. 0.191 41. 0.25 (Sec. 4.6, Ex. 1) 42. $0.\bar{5} \approx 0.556$
 43. $n = 25\% \cdot 0.008$ (Sec. 5.4, Ex. 3) 44. 37.5% or $37\frac{1}{2}\%$