

## Chapter 2 Review Exercise Answers

1.  $1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 = 1$       2.  $2 \cdot 2 \cdot 2 \cdot 2 = 16$       3.  $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 = 243$   
4.  $4 \cdot 4 \cdot 4 = 64$       5. 16      6.  $17 \cdot 17 = 289$   
7.  $20 \cdot 20 \cdot 20 = 8,000$       8.  $10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 = 10,000,000$   
9.  $10^3$       10.  $10^7$       11.  $10^5$       12.  $10^1$   
13.  $7 \cdot 10^1$       14.  $84 \cdot 10^2$       15.  $3 \cdot 10^5$       16.  $12 \cdot 10^5$   
17. 6      18. 2      19. 3      20. 10  
21. 14      22. 12      23. 7      24. 16  
25. 6      26. 4      27. 17      28. 21  
29. 9      30. 23      31. 30      32. 0  
33. 16      34. 9      35. 30      36. 16  
37. 9      38. 3      39. 5      40. 8  
41.  $212^\circ \text{ F}$       42.  $59^\circ \text{ F}$       43.  $50^\circ \text{ C}$       44.  $15^\circ \text{ C}$   
45.  $A = 84$       46.  $W = 16$       47.  $A = 25$       48.  $z = 2$   
49.  $a = 5$       50.  $C = 6$   
51. Tracey's average rate of speed was 13 miles per hour.  
52. Timara can fly 870 miles in 6 hours.  
53. It will take Charles 9 hours to get there.  
54. Peetey's average rate of speed was 29 centimeters per minute.  
55. 3, 6, 9, 12, and 15      56. 6, 12, 18, 24, and 30  
57. 11, 22, 33, 44, and 55      58. 12, 24, 36, 48, and 60  
59. 1 and 18; 2 and 9; 3 and 6.  
60. 1 and 36; 2 and 18; 3 and 12; 4 and 9; 6 and 6.  
61. 1 and 45; 3 and 15; 5 and 9.  
62. 1 and 60; 2 and 30; 3 and 20; 4 and 15; 5 and 12; 6 and 10.

- 63.** Prime: 17, 29, and 11      Composite: 15, 81, and 45      Neither: 0  
**64.** Prime: 2, 61, 43, and 31      Composite: 70, 62, and 57      Neither: 1  
**65.** 3 and 5      **66.** None of these.      **67.** 2      **68.** 2, 3, and 5  
**69.** 3      **70.** 2 and 5      **71.** 5      **72.** 2 and 3  
**73.** Yes.      **74.** Yes.      **75.** No.      **76.** Yes.  
**77.** ...  $3 \cdot 13 = 39$  is a composite factor of 741.      **78.** ...  $5 \cdot 7 = 35$  is a composite factor of 1,505.  
**79.**  $2 \cdot 2 \cdot 2 \cdot 2 = 2^4$       **80.**  $2 \cdot 2 \cdot 11 = 2^2 \cdot 11$   
**81.**  $2 \cdot 5 \cdot 5 = 2 \cdot 5^2$       **82.**  $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 2^5 \cdot 3$   
**83.**  $5 \cdot 5 \cdot 5 = 5^3$       **84.**  $2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 = 2^2 \cdot 3^2 \cdot 5$   
**85.**  $5 \cdot 5 \cdot 13 = 5^2 \cdot 13$       **86.**  $5 \cdot 5 \cdot 7 \cdot 7 = 5^2 \cdot 7^2$   
**87.** 5      **88.** 8      **89.** 14      **90.** 18  
**91.** Relatively prime      **92.** 6      **93.** 12      **94.** 15  
**95.** 30      **96.** 24      **97.** 45      **98.** Relatively prime  
**99.**  $2^2 = 4$       **100.**  $3^1 \cdot 5^2 = 75$   
**101.**  $2^1 \cdot 3^2 \cdot 7^1 = 126$