

Answer Key

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| 1. 4900 | 31. 23 |
| 2. 3600 | 32. 3 |
| 3. 6400 | 33. 7 |
| 4. 512000 | 34. 5 |
| 5. 8100 | 35. 15 |
| 6. 2500 | 36. $\frac{2}{3}$ |
| 7. 121 | 37. $\frac{3}{7}$ |
| 8. 1331 | 38. $\frac{2}{7}$ |
| 9. 8000 | 39. $\frac{7}{25}$ |
| 10. 160000 | 40. $3\frac{1}{5}$ |
| 11. 2 | 41. $3\frac{1}{5}$ |
| 20 | 42. $2\frac{5}{8}$ |
| 2 | 43. $2\frac{5}{8}$ |
| 200 | 44. $1\frac{1}{6}$ |
| 12. 3 | 45. $\frac{3}{4}$ |
| 30 | 46. $\frac{7}{36}$ |
| 3 | LCD = 36 |
| 300 | 47. $\frac{7}{72}$ |
| 13. 5 | LCD = 72 |
| 50 | 48. $\frac{13}{12}$ |
| 5 | LCD = 12 |
| 500 | 49. $\frac{7}{40}$ |
| 14. 7 | LCD = 40 |
| 70 | 50. $\frac{2}{9}$ |
| 7 | LCD = 9 |
| 70 | 51. $\frac{1}{12}$ |
| 15. 2 | LCD = 12 |
| 20 | 52. $\frac{5}{24}$ |
| 2 | LCD = 24 |
| 20 | 53. $\frac{3}{20}$ |
| 16. 0.012 | LCD = 20 |
| 17. 0.12 | 54. $\frac{2}{15}(=8/60)$ |
| 18. 0.01 | LCD = 60 |
| 19. 0.008 | 55. $\frac{1}{15}(=2/30)$ |
| 20. 0.04 | LCD = 30 |
| 21. 0.006 | 56. $\frac{1}{6} \times 31.20 = \5.20 |
| 22. 0.1 | 57. $12 - 3\frac{3}{4} - 2\frac{1}{2} = 7 - \frac{3}{4} - \frac{1}{2} = 6 - \frac{1}{4}$ |
| 23. 0.008 | $= 5\frac{3}{4} = 5\frac{3}{4}$ (cases) |
| 24. 0.0008 | 58. $\frac{1}{2} + \frac{3}{4} = 1\frac{1}{4} = 1\frac{1}{4}$ yd |
| 25. 0.01 | 59. $5 - 2\frac{2}{3} = 2\frac{1}{3} = 2\frac{1}{3}$ credits |
| 26. 26 | 60. $1\frac{3}{4} + 2\frac{1}{6} = 3\frac{11}{12} = 3\frac{11}{12}$ mi |
| 27. 14 | 61. $\frac{6}{54} = \frac{1}{9} = \frac{1}{9}$ |
| 28. 15 | 62. $5\frac{1}{3} - 2\frac{2}{3} = 2\frac{2}{3} = 2\frac{2}{3}$ |
| 29. 0 | |
| 30. 9 | |

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63. $25\frac{3}{4} + 6\frac{3}{8} = 32\frac{1}{8} = 32\frac{1}{8}$
64. $24\frac{1}{2} - 12\frac{5}{8} = 11\frac{7}{8} = 11\frac{7}{8}$ pounds
65. $32 \times \frac{3}{4} = 24$
66. $7\frac{1}{2} + 15\frac{3}{4} = 23\frac{1}{4} = 23\frac{1}{4}$ inches
67. $15.7 + 7\frac{1}{2} + 10\frac{1}{5} = 15.7 + 7.5 + 10.2 = 33.4$
68. $2\frac{1}{2} + 3\frac{2}{3} = 6\frac{1}{6} = 6\frac{1}{6}$ credits
69. $\frac{12800}{40} = 320$
70. $38\frac{3}{4} - 31\frac{1}{4} = 7\frac{3}{4} - \frac{1}{4} = 7\frac{2}{4} = 7\frac{1}{2}$ pounds
71. $1 + 20\% = 1.2$
 $60 \times 1.2 = \$72$
72. $5\% \times 72 = 3.6$ (tax)
 $(72 + 3.6) \times 2 = 75.6 \times 2 = \151.20
73. Prob(red) = $\frac{5}{8}$
Prob(blue) = $\frac{1}{8}$
Prob(yellow) = $2/8 = \frac{1}{4}$
 $48 \times \frac{1}{4} = 12$
74. $\frac{15}{90} \times 180 = 30$
75. $60 \div 2 = 30$ (half-perimeter)
Since the ratio is 2:1, the partition is $\frac{2}{3}$ and $\frac{1}{3}$.
 $30 \times \frac{2}{3} = 20$ (length)
 $30 \times \frac{1}{3} = 10$ (width)
 $20 \times 10 = 200$ ft² (area)
76. $\frac{14}{6} \times 9 = \frac{7}{3} \times 9 = \21
77. $8:00 + 7:25 + 4:30 + 6:15 + 4:35 = 34:45 = 30\frac{3}{4}$ hr
 $30\frac{3}{4} \times 12 = \369
78. $84 \times \frac{1}{3} \times \frac{3}{4} = 21$
79. $1 - 20\% = 0.8$
 $30 \times 0.8 = \$24$
80. 1 foot = 12 inches
8 feet = 96 inches
 $96 \div 10 = 9.6$ (hr)
 $8 \div 3 = 2R2$
 $30 \times 2 = 60$ min = 1 hr (Charlie rests twice.)
 $9.6 + 1 = 10.6 = 10$ hr & 36 min
81. $12 \div 16 = \frac{3}{4} = 3/4$ lb
82. $25\% \times 24 = \frac{1}{4} \times 24 = 6$ hr
83. B
 $5/6 = 35/42$ (A speed)
 $6/7 = 36/42$ (B speed, faster)
84. $2 + 6 = 8$
 $3 + 5 = 8$
 $8 \times 8 - 18 = 46$
85. the total of first 4 tests = $82 + 82 + 76 + 92 = 332$
the total of five tests = $86 \times 5 = 430$
the fifth test = $430 - 332 = 98$