

# Answer Key

1. 1.6

2. 2.9

3. 5.6

4. 43

5. 1.5

6. 1.9

7. 3.2

8. 2.8

9. 2.3

10. 31

11. 2.4

12. 14

13. 3.2

14. 6

15. 94

16. 160

17. 1.3

18. 7.2

19. 3.6

20. 7.55

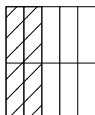
21.  $\frac{2}{5} = \frac{4}{10}$

22.  $\frac{1}{3} = \frac{3}{9}$

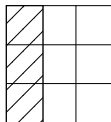
23.  $\frac{2}{3} = \frac{6}{9}$

24.  $\frac{1}{2} = \frac{4}{8}$

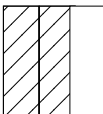
25.  $\frac{2}{5} = \frac{4}{10}$



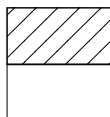
26.  $\frac{1}{3} = \frac{3}{9}$



27.  $\frac{2}{3} = \frac{6}{9}$



28.  $\frac{1}{2} = \frac{4}{8}$



29.  $\frac{1}{2} = \frac{3}{6}$

30.  $\frac{6}{10}$

31.  $\frac{1}{3} = \frac{3}{9}$

32.  $\frac{3}{4} = \frac{9}{12}$

33.  $\frac{1}{8} = \frac{3}{24}$

34.  $\frac{2}{7} = \frac{8}{28}$

35. 7, 12

36. 15, 5

37. 3, 24

38. 18, 5

39. 18, 24

40. 20, 28

41.  $12 - (4 + 1) = 7$  more miles

42.  $17 + 3 = 20$

$20 \times 2 = 40$

$40 - 3 = 37$  yrs old

43.  $40 \div 20 = 2$

$2 \times 2 = 4$  gallons

44.  $200 \times 2 = \$400$

45.  $600 \times 3 = \$1800$

46.  $5 \times 2 = 10$  sq. inches

47. 8 vertices

48. The square

The square has an area of  $20 \times 20 = 400$ . The rectangle has a perimeter of  $20 \times 4 = 80$ , therefore the width is

$(80 \div 2) - 30 = 10$ . The area of the rectangle is  $10 \times 30 = 300$ .

We can conclude that the square has a larger area.

49.  $276 \div 3 = 92$

50.  $21 \times 6 = 126$  min

51.  $81 - 53 = 28$

52.  $121 - 46 = 75$

53. 312, 200, 217, 156

54.  $450 + 530 = 980$

$980 \div 20 = 49$  teachers

55.  $13 \times 2 = 26$

$13 + 26 = 39$  points

56.  $3 \times 12 = 36$

$\frac{1}{3} \times 12 = 4$

$36 + 4 = 40$  inches

57.  $36 \div 3 = 12$  (Mary)

$12 \times 2 = 24$  (Susan)

58.  $51 \times 2 = 102$  words

$102 \times 5 = 510$  words

59.  $2 + 8 = 10$

$4 \times 10 + 2 = \$42.00$

60.  $2:35 - 0:15 = 2:20$  P.M.

# Answer Key

1. 10.9
2. 10.2
3. 14.9
4. 7.6
5. 17
6. 6.2
7. 16
8. 14.7
9. 11
10. 16.7
11. 1.1
12. 1.3
13. 4.2
14. 5.2
15. 1.8
16. 3.5
17. 3.7
18. 3.9
19. 0.9
20. 1.8
21. 6, 7
22. 6, 7
23. 9, 15
24. 9, 5
25. 10, 10
26. 14, 10
27. 4, 10
28. 14, 27
29. 3, 15
30. 8, 12
31. 4, 3
32. 14, 10
33. 6, 21
34. 2, 75
35. 12, 15
36. 8, 2
37. 28, 15
38. 12, 20
39. 1.01, 0.89, 0.3, 0.12, 0.04
40.  $\frac{11}{5} = 2\frac{1}{5}, 2\frac{3}{5}, 3\frac{1}{5}, \frac{21}{5} = 4\frac{1}{5}$
41.  $14 + 12 = 26$  birds (Duck is a kind of birds.)
42. (a)  $7 - 2 = 5, 5 \times 5 = 25$   
lollipops  
(b)  $42 \div 7 = 6$  days  
(c)  $20 \div 2 = 10, 10 \times 5 = 50$   
lollipops
43.  $30 - 17 - 3 = 10$
44.  $22 - 5 - 3 - 2 = 12$
45.  $82 + 78 + 83 + 85 = 328$   
 $328 \div 4 = 82$
46.  $111 - 11$
47.  $150 \div 30 = 5$  hrs
48. 1, 2, 3, 4, 5, 6
49.  $91 - 1 = 90$   
 $90 \div 2 = 45$   
 $45 + 1 = 46$
50.  $4 \times 12 = 48$  cm
51.  $15 - 6 - 5 = 4$
52.  $48 \div 3 = 16$
53.  $15 + 19 = 34$  cups
54.  $5 \times 24 = 120$
55.  $8 + 7 = 15$   
 $8 \times 15 = 120$  mi
56.  $52 \div 4 = \$13$
57.  $900 \div 6 = 150$  coins
58.  $70 \div 14 = 5$  balloons
59.  $165 - 16 - 27 = 122$  books
60.  $16 - 10 = 6$   
 $6 \div 2 = 3$  marbles

# Answer Key

1. 10.85
2. 11
3. 12
4. 17.7
5. 11
6. 11.8
7. 5.5
8. 12.3
9. 11.86
10. 15.8
11. 4.36
12. 1.28
13. 1.89
14. 6.37
15. 3.38
16. 2.76
17. 0.78
18. 4.61
19. 3.05
20. 1.677
21. 6, 28
22. 15, 35
23. 18, 28
24. 24, 25
25. 18, 8
26.  $\frac{3}{5} = \frac{12}{20} < \frac{3}{4} = \frac{15}{20}$
27.  $\frac{4}{6} = \frac{16}{24} < \frac{5}{8} = \frac{15}{24}$

28.  $\frac{5}{6} > \frac{4}{6}$
29.  $\frac{5}{9} < \frac{2}{3}$
30.  $\frac{6}{9} > \frac{1}{3}$
31.  $\frac{5}{8} > \frac{2}{4}$
32.  $\frac{5}{12} < \frac{3}{4}$
33.  $\frac{7}{18} > \frac{1}{6}$
34.  $\frac{3}{16} < \frac{1}{6}$
35.  $\frac{2}{3} > \frac{5}{12}$
36.  $>$
37.  $<$
38.  $<$
39.  $>$
40.  $>$
41.  $21 \div 3 = 7$
42.  $9 + 5 = 14$  (Gerald, older)
43.  $24 \times 2 = 48$  days
44.  $28 \div 4 = 7$  (cars)
45.  $\$15 = 60$  quarters  
60 days
46.  $1\frac{1}{2} + 1\frac{1}{2} = 3$  lb
47. (a) 11 (b) 5
48.  $300 \times 3 = \$900$
49.  $175 \div 5 = 35$  glasses
50.  $306 \div 6 = 51$  pies
51.  $2 \times 4 = \$8.00$

52.  $59 - 17 + 20 = 62$  parents
53.  $261 - 165 = 96$
54.  $36 \div 4 = 9$  students
55. 2 pencils + 1 eraser = 4.6  
1 pencil + 2 erasers = 4.1  
3 pencils + 3 erasers = 8.7  
6 pencils + 6 erasers =  
\$17.40
56.  $1:32 + 2:28 = 4:00 = 4$  hours  
 $4 \times 15 = \$60$
57.  $200 - 27 - 30 - 21 = 122 =$   
\$1.22
58.  $58 - 4 = 54$   
 $54 \div 6 = 9$  balloons
59.  $2 + 9 + 9 + 20 = 40$   
 $6:30 + 0:40 = 6:70 = 7:10$   
A.M.
60.  $1 + 2 + 3 + 4 + 5 + 6 + 7 +$   
 $8 + 9 = 45$   
 $45 \div 3 = 15$   
 $1 + 5 + 9 = 15$   
 $2 + 6 + 7 = 15$   
 $3 + 4 + 8 = 15$

1, 5, 9
2, 6, 7
3, 4, 8

# Answer Key

1. 15.42
2. 11.2
3. 31.1
4. 11.3
5. 10
6. 22.3
7. 17.03
8. 10.8
9. 5.91
10. 1.9
11. 3.7
12. 5.1
13. 3.9
14. 5.5
15. 2.7
16. 3.3
17. 3.3
18. 5.73
19. 0.69
20. 4.588
21. 6, 28
22. 15, 35
23. 18, 28
24. 24, 25
25. 18, 8
26.  $\frac{3}{5} = \frac{12}{20} < \frac{3}{4} = \frac{15}{20}$
27.  $\frac{4}{6} = \frac{16}{24} < \frac{5}{8} = \frac{15}{24}$
28.  $\frac{5}{6} > \frac{4}{6}$
29.  $\frac{5}{9} < \frac{2}{3}$
30.  $\frac{6}{9} > \frac{1}{3}$
31.  $\frac{5}{8} > \frac{2}{4}$
32.  $\frac{5}{12} < \frac{3}{4}$
33.  $\frac{7}{18} > \frac{1}{6}$
34.  $\frac{3}{16} < \frac{1}{6}$
35.  $\frac{2}{3} > \frac{5}{12}$
36. >
37. <
38. <
39. >
40. >
41.  $12 - 5 = 7$
42.  $30 \times 3 = 90$
43.  $21 \div 7 = 3$  (wks)  
 $3 \times 2 = 6$  pounds
44.  $800 - 600 = 200$   
 $200 \div 5 = 40$
45.  $400 - 300 = 100$   
 $100 \div 2 = 50$  (calf)  
 $300 + 50 = 350$  (cow)
46.  $1 + 2 + 4 = 7$   
 $28 \div 7 = 4$   
 $1 \times 4 = 4$  (3<sup>rd</sup>)  
 $2 \times 4 = 8$  (2<sup>nd</sup>)  
 $4 \times 4 = 16$  (1<sup>st</sup>)  
 $4 + 8 + 16 = 28$  (double-check)
47.  $43 \div 3 = 14$  R1
48.  $35 \times 6 = \$210$
49.  $0.3 \times 7 = \$2.10$
50.  $8 \div 40 = 0.20 = 20\text{c}$
51.  $75 \div 15 = 5$  plates
52.  $392 \div 7 = 56$
53.  $86 - 59 = \$27$
54.  $15 \div 5 = 3$  pieces
55.  $9 \times 2 \times 20 = 360$  rooms
56.  $2 \times 0.85 = 1.70$   
 $3 \times 0.90 = 2.70$   
 $1.70 + 2.70 = 4.40$   
 $5 - 4.40 = \$0.60$
57.  $2 \times 24 + 14 = 62$
58. (a)  $9:30 - 1:00 = 8:30$  P.M.  
(b)  $9:30$  A.M.
59.  $13:15 - 1:30 = 11:45$  A.M.
60. 16

# Answer Key

- |  |                                |  |
|--|--------------------------------|--|
| 1. 1, 2, 5, 10   | 27. B                          | 55. $2 \times 2 + 3 = 7$   |
| 2. 1, 2, 4, 8, 16  | 28. B                          | $14 \div 7 = \boxed{\$2.00}$   |
| 3. 1, 2, 3, 6  | 29. C                          | 56. $20 \div 4 = \$5.00$   |
| 4. 1, 2, 4, 8  | 30. A                          | 57. $122 - 55 = 67$  |
| 5. 1, 2, 3, 6, 9, 18   | 31. 8.5                        | 58. $28 \div 2 = 14$ people  |
| 6. 1, 2, 4   | 32. 7.8                        | 59. $7 - 4.75 = \$2.25$  |
| 7. 1, 3, 5, 15   | 33. 4.84                       | 60. $6 - 2 = 4$  |
| 8. 1, 2, 3, 4, 6, 12   | 34. 8.4                        | $4 \times 7 = 28$  |
| 9. 1, 3, 9   | 35. 11.24                      | 61. $94 \div 15 = 6 \text{ R}4$  |
| 10. 1, 2, 7, 14  | 36. 9.15                       | $\boxed{6}$ dolls  |
| 11. $\frac{39}{78} = \frac{1}{2}$  | 37. 10.45                      | 62. $24000 \div 12 = 2,000$  |
| 12. $\frac{160}{960} = \frac{1}{6}$  | 38. 9.645                      | $2500 - 2000 = \boxed{\$500}$  |
| 13. $\frac{160}{96} = \frac{5}{3}$   | 39. 9.282                      | 63. $1 - \frac{1}{4} = \frac{3}{4}$  |
| 14. $\frac{6}{8} = \frac{3}{4}$  | 40. 7.569                      | $\frac{3}{4} - \frac{1}{2} = \frac{1}{4}$  |
| 15. $\frac{12}{16} = \frac{3}{4}$  | 41. 1.66                       | $2 \div \frac{1}{4} = 2 \times 4 = 8$ meters   |
| 16. $\frac{64}{144} = \frac{4}{9}$   | 42. 6.1                        | 64. $12 \times \frac{1}{2} = 6$  |
| 17. $\frac{50}{75} = \frac{2}{3}$  | 43. 1.07                       | $27 \times \frac{1}{3} = 9$  |
| 18. $\frac{192}{640} = \frac{12}{40} = \frac{3}{10}$                                 | 44. 0.69                       | $6 + 9 = 15$   |
| 19. $\frac{250}{625} = \frac{2}{5}$  | 45. 3.46                       | $12 + 27 - 15 = 24$ marbles  |
| 20. $\frac{90}{150} \xrightarrow{+10} \frac{9}{15} \xrightarrow{\div 3} \frac{3}{5}$ | 46. 0.96                       | 65. $80 \div 4 = 20$   |
| 21. $\frac{40}{60} = \frac{2}{3}$  | 47. 0.99                       | $20 \times 45 = 900$ pages   |
| 22. $\frac{45}{60} = \frac{3}{4}$  | 48. 1.94                       | 66. $7 + 5 = 12$   |
| 23. A  | 49. 0.43                       | $18 - 12 = 6$ tables   |
| 24. C  | 50. 0.65                       | 67. $20 - 2 = 18$  |
| 25. C  | 51. $60 \div 20 = 3$           | $18 \div 3 = \boxed{\$6}$  |
| 26. C  | $3 \times 5 = 15$ gal          | 68. $10 \div 2 = 5$  |
|  | 52. $11 + 1 + 11$              | $5 - 2 = 3$ (right)  |
|  | 53. $42 \div 6 = 7$            | $5 + 2 = \boxed{7}$ (left)   |
|  | $7 \times 7 = \boxed{49}$ days | 69. (a) \$33 (b) \$15 (c) \$60   |
|  | 54. $45 \times 2 = 90$         | 70. (a) $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ pizza                             |
|  | $90 \div 30 = 3$ gal           | (b) $\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$ , $\frac{1}{4} \div 3 = \frac{1}{12}$ each |
|  |                                | (c) $\frac{1}{2} + \frac{1}{12} = \frac{7}{12}$ (yourself)                               |

# Answer Key

- |  |                                |  |
|--|--------------------------------|--|
| 1. 1, 2, 5, 10   | 27. B                          | 55. $2 \times 2 + 3 = 7$   |
| 2. 1, 2, 4, 8, 16  | 28. B                          | $14 \div 7 = \boxed{\$2.00}$   |
| 3. 1, 2, 3, 6  | 29. C                          | 56. $20 \div 4 = \$5.00$   |
| 4. 1, 2, 4, 8  | 30. A                          | 57. $122 - 55 = 67$  |
| 5. 1, 2, 3, 6, 9, 18   | 31. 8.5                        | 58. $28 \div 2 = 14$ people  |
| 6. 1, 2, 4   | 32. 7.8                        | 59. $7 - 4.75 = \$2.25$  |
| 7. 1, 3, 5, 15   | 33. 4.84                       | 60. $6 - 2 = 4$  |
| 8. 1, 2, 3, 4, 6, 12   | 34. 8.4                        | $4 \times 7 = 28$  |
| 9. 1, 3, 9   | 35. 11.24                      | 61. $94 \div 15 = 6 \text{ R}4$  |
| 10. 1, 2, 7, 14  | 36. 9.15                       | $\boxed{6}$ dolls  |
| 11. $\frac{39}{78} = \frac{1}{2}$  | 37. 10.45                      | 62. $24000 \div 12 = 2,000$  |
| 12. $\frac{160}{960} = \frac{1}{6}$  | 38. 9.645                      | $2500 - 2000 = \boxed{\$500}$  |
| 13. $\frac{160}{96} = \frac{5}{3}$   | 39. 9.282                      | 63. $1 - \frac{1}{4} = \frac{3}{4}$  |
| 14. $\frac{6}{8} = \frac{3}{4}$  | 40. 7.569                      | $\frac{3}{4} - \frac{1}{2} = \frac{1}{4}$  |
| 15. $\frac{12}{16} = \frac{3}{4}$  | 41. 1.66                       | $2 \div \frac{1}{4} = 2 \times 4 = 8$ meters   |
| 16. $\frac{64}{144} = \frac{4}{9}$   | 42. 6.1                        | 64. $12 \times \frac{1}{2} = 6$  |
| 17. $\frac{50}{75} = \frac{2}{3}$  | 43. 1.07                       | $27 \times \frac{1}{3} = 9$  |
| 18. $\frac{192}{640} = \frac{12}{40} = \frac{3}{10}$                                 | 44. 0.69                       | $6 + 9 = 15$   |
| 19. $\frac{250}{625} = \frac{2}{5}$  | 45. 3.46                       | $12 + 27 - 15 = 24$ marbles  |
| 20. $\frac{90}{150} \xrightarrow{+10} \frac{9}{15} \xrightarrow{\div 3} \frac{3}{5}$ | 46. 0.96                       | 65. $80 \div 4 = 20$   |
| 21. $\frac{40}{60} = \frac{2}{3}$  | 47. 0.99                       | $20 \times 45 = 900$ pages   |
| 22. $\frac{45}{60} = \frac{3}{4}$  | 48. 1.94                       | 66. $7 + 5 = 12$   |
| 23. A  | 49. 0.43                       | $18 - 12 = 6$ tables   |
| 24. C  | 50. 0.65                       | 67. $20 - 2 = 18$  |
| 25. C  | 51. $60 \div 20 = 3$           | $18 \div 3 = \boxed{\$6}$  |
| 26. C  | $3 \times 5 = 15$ gal          | 68. $10 \div 2 = 5$  |
|  | 52. $11 + 1 + 11$              | $5 - 2 = 3$ (right)  |
|  | 53. $42 \div 6 = 7$            | $5 + 2 = \boxed{7}$ (left)   |
|  | $7 \times 7 = \boxed{49}$ days | 69. (a) \$33 (b) \$15 (c) \$60   |
|  | 54. $45 \times 2 = 90$         | 70. (a) $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ pizza                             |
|  | $90 \div 30 = 3$ gal           | (b) $\frac{1}{2} - \frac{1}{4} = \frac{1}{4}$ , $\frac{1}{4} \div 3 = \frac{1}{12}$ each |
|  |                                | (c) $\frac{1}{2} + \frac{1}{12} = \frac{7}{12}$ (yourself)                               |

# Answer Key

1. 1, 2, 3, 5, 6, 10, 15, 30
2. 1, 2, 3, 4, 6, 12
3. 1, 2, 13, 26
4. 1, 2, 4, 5, 10, 20
5. 1, 3, 9, 27
6. 1, 2, 4, 8, 16, 32
7. 1, 2, 4, 7, 14, 28
8. 1, 2, 11, 22
9. 1, 5, 25
10. 1, 3, 7, 21
11.  $\frac{33}{77} = \frac{3}{7}$
12.  $\frac{625}{1000} = \frac{5}{8}$
13.  $\frac{18}{24} = \frac{3}{4}$
14.  $\frac{15}{45} = \frac{1}{3}$
15.  $\frac{36}{120} = \frac{3}{10}$
16.  $\frac{384}{512} = \frac{48}{64} = \frac{3}{4}$
17.  $\frac{48}{60} = \frac{4}{5}$
18.  $\frac{48}{72} = \frac{2}{3}$
19.  $\frac{36}{48} = \frac{3}{4}$
20.  $5.5 = 5\frac{5}{10} \xrightarrow{\text{reduce}} 5\frac{1}{2}$
21.  $1.25 = 1\frac{25}{100} \xrightarrow{\text{reduce}} 1\frac{5}{20}$   
 $\xrightarrow{\text{reduce}} 1\frac{1}{4}$
22.  $\frac{35}{100} = \frac{7}{20}$
23.  $0.2 = \frac{1}{5}$
24.  $0.7 = \frac{7}{10}$
25.  $0.4 = \frac{2}{5}$
26.  $0.9 = \frac{9}{10}$
27.  $0.5 = \frac{1}{2}$
28.  $0.10 = \frac{1}{10}$
29.  $0.6 = \frac{6}{10} = \frac{3}{5}$
30.  $0.12 = \frac{12}{100} = \frac{3}{25}$
31. 11.1
32. 12.3
33. 12.8
34. 11.9
35. 14.8
36. 14.7
37. 5.3
38. 0.6
39. 4.1
40. 1
41. 5.8
42. 4.7
43. 2.7
44. 4.4
45. 13.84
46. 6.97
47. 8.81
48. 13.53
49. 11.97
50. 9.98
51.  $12 + 5 = 17$   
 $17 + 7 = 24$
52.  $30 \div 3 = 10$   
 $10 \times 2 = 20$   
 $10 + 3 = 13$  yrs old (Bill)  
 $20 + 3 = 23$  yrs old (Juan)
53.  $82 + 78 + 83 = 243$   
 $243 \div 3 = 81$
54. 100
55. B
56.  $10:10 - 8:40 = 1:30 = 1$  hr 30 min
57. 998
58. 101
59.  $1000 \div 10 = 100$  (pennies) = 1 dollar = \$1.00
60.  $16 \div 2 = 8$   
 $8 \times 3 = 24$  ft
61.  $14 \div 2 = 7$   
 $7 - 5 = 2$  inches
62.  $2(5 + 10) = 30$  cm
63.  $63 \times 7 = 441$
64.  $12 \times 7 = 84$
65.  $12.50 \times 2 = \$25.00$
66.  $62 - 39 = 23$
67.  $15 \div 3 = 5$  (Mary)  
 $5 \times 2 = 10$  (Susan)
68.  $6 - \frac{1}{2} \times 6 = 3$  (Amy's)  
 $6 - \frac{1}{3} \times 6 = 4$  (Paul's)  
 $3 + 4 = 7$  cans
69.  $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$   
 $1 - \frac{3}{4} = \frac{1}{4}$  (leftover)
70. 8 or 9