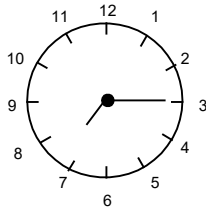
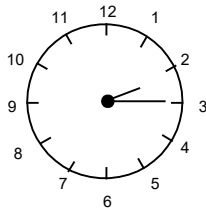


Answer Key

1. 8
2. 0.75
3. 9
4. 541
5. 61
6. $1400 \div 4 \div 2 = 175$ min
7. $6:30 + 0:45 = 7:15$ pm



8. $2:40 - 0:25 = 2:15$



9. $117 - 20 = 97$
 $97 - 20 = 77$
 $77 - 20 = \boxed{57}$
10. 1000
11. 12:55 P.M.
12. \$87.50
13. $271 - 196 = 75$
14. $96 \div 4 = 24$
15. 12
16. $480 + 440 + 510 = 1,430$ (mi)
17. 2.73
18. $628 - 249 = 379$
19. $8 \times 490 = 3920$
20. 6 numbers
789, 798, 897, 879, 978, 987
21. 166
22. 51
23. 9:40 A.M.
24. 4 & 625
25. 0.25
26. $12 \times 3 + 23 \times 2 = 82$
27. 4

28. 4
29. 9
30. $(9 - 8) + (7 - 6) + (5 - 4) + (3 - 2) + 1 = 5$
31. A
32. $8 + 2 = 10$
 $5 + 2 = 7$ (width)
 $10 \times 7 = \boxed{70 \text{ ft}^2}$
33. $\frac{1}{2} \times 50 = 25$
 $25 + 50 = \boxed{75}$
34. What is the width?
 $8 - 2 - 2 = 4$
What is the length?
 $10 + 4 - 6 = 8$
Thus, the area is
 $8 \times 4 = \boxed{32 \text{ in}^2}$.
35. 12,059
36. $12 \div 3 = 4$
 $4 \times 5 = \boxed{\$20.00}$
37. Kim: $163 + 347 = 510$
Bill: $300 \times 2 = 600$
Difference: $600 - 510 = \boxed{90}$
38. $21 \div 3 = 7$
 $21 - 7 = \boxed{14}$
39. $3 \times 12 + 14 = 36 + 14 = 50$ (min)
40. $30 - 6 = 24$
 $24 = 16 + 8$
 $16 + 3 + 3 = \boxed{22 \text{ yrs old}}$
41. 4 R 2
42. 47
43. 144
44. 7.8
45. 30
46. 10:30 A.M.
47. 50
48. 4
49. 16
50. 18
51. 7 & 1 (Remainder)
52. 105
53. 17.5
54. 5
55. 66
56. 37 & 4 (Remainder)
57. 4
58. 210

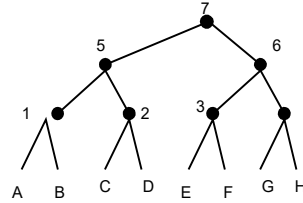
MAP 250 (T3) Issue 1

59. 5
60. 74.7
61. {1, 5, 25 }
62. {1, 3, 7, 21 }
63. {1, 2, 11, 22 }
64. {1, 2, 13, 26 }
65. {1, 3, 9, 27 }
66. {1, 2, 3, 4, 6, 12 }
67. {1, 2, 4, 5, 10, 20 }
68. {1, 2, 4, 8, 16, 32 }
69. {1, 2, 4, 7, 14, 28 }
70. {1, 2, 3, 5, 6, 10, 15, 30 }
71. $180-95 = 85$
72. $8 \times 7 = 56$
73. (a) $3 \times 2 = 6$
(b) $3 \times 3 = 9$
(c) $4 \times 3 = 12$
74. (a) $60 \times (5/6) = 50$
(b) $60 \times (5/6) = 50$
75. $20.00 - 3 \times 4.00 = 8$
76. $(19+21)/2 = 20$
77. D
78. (a) $56/8 = 7$
(b) $36/9 = 4$
79. (a) 38 (b) 54 (c) J
80. (a) $42 \times (6/7) = 36$
(b) $42 \times (1 - 6/7) = 6$
81. $90 - 63 = 27$
82. $2 \times 12/6 = 4$
83. (a) $9+2+4 = 15$
(b) $9 \times 2 \times 4 = 72$
84. $42 \times \frac{3}{7} = 18$
85. $70 \times 2 = 140$
86. $5 \times 45 = 225$
87. (a) $120/(2+1) \times 2 = 80$
(b) $120/(2+1) = 40$
88. (a) $64 \times 5/(5+3) = 40$
(b) $64 \times 3/(5+3) = 24$
89. $(2 \times 50 - 80) = 20$
90. $7 \times (30/5) = 42$

Answer Key

1. 45
2. 0.8
3. 9
4. 9.6
5. 7
6. $125 \times 3 = 375$
7. 17 cm
8. $19 - 6 = 13$
 $13 - 5 = 8$
 $8 - 4 = \boxed{4}$
9. 8 vertices
10. $5:45 + 0:25 = 6:10$
11. $982 - 615 = 367$
12. $90 - 6 \times 8 = 42$
 $42 \div 6 = \boxed{7 \text{ bottles}}$
13. 34 in
14. $425 - 343 = 82$
15. $\frac{1}{2} \times 24 = 12$
 $\frac{2}{3} \times 12 = \boxed{8}$
16. $\frac{2}{5} = 2/5$
17. $21 - 3 = 18$
18. $15 \times 3 = 45$
19. 20
20. 45
21. $\frac{4}{5} = 4/5$
22. 45
23. $1\frac{1}{12}$
24. $120 \div 7 = 17R1$
Ans = 17 & 1 (R)
25. 8
26. B
27. $\square = 7$
28. $\square = 8$
29. $\frac{3}{4} \times 12 = 9 \text{ in}$
30. $4:45 + 50 = 5:35$
31. $500 \div 60 = 8 \text{ R } 20$
Ans = 9 buses
32. $18 - 2 \times 3 = 12$
33. 36 inches
34. $5 \times 16 \times 7 = \boxed{560}$
35. $9 \times 8 = \boxed{72}$
36. $123 + (123 - 48) = 198$

37. $2 \times 16 + 5 \times 14 = 32 + 70 = 102$
 $102 \div 6 = \boxed{\$17.00}$
38. $240 \div 3 = \$80$
39. $96 \div 8 = 12$
 $2(8 + 12) = \boxed{40}$
40. 7 matches are needed



41. 4
42. 110
43. 63
44. 9
45. 1:05 P.M.
46. 11
47. 4
48. B
49. 17
50. 12:10 P.M.
51. 72
52. 25
53. 900
54. 9.6
55. 3150
56. 112
57. 84
58. 3
59. 50
60. 10
61. {1, 3, 11, 33 }
62. {1, 3, 13, 39 }
63. {1, 2, 19, 38 }
64. {1, 5, 7, 35 }
65. {1, 3, 5, 9, 15, 45 }
66. {1, 2, 3, 4, 6, 9, 12, 18, 36 }
67. {1, 2, 4, 5, 8, 10, 20, 40 }
68. {1, 2, 4, 11, 22, 44 }
69. {1, 2, 3, 6, 7, 14, 21, 42 }
70. { 2, 3, 5, 7, 11, 13, 17, 19 }

MAP 250 (T3) Issue 2

71. $130 - 82 = 48$

72. $8 \times 7 = 56$

73. (a) $3 \times 3 = 9$

(b) $3 \times 4 = 12$

(c) $5 \times 3 = 15$

74. (a) $60 \times (5/6) = 50$

(b) $60 \times (5/6) = 50$

75. $20.00 - 3 \times 5.00 = 5$

76. $(14 + 36) / 2 = 25$

77. D

78. (a) $63 / 9 = 7$

(b) $40 / 8 = 5$

79. (a) 53 (b) 52 (c) H

80. (a) $48 \times (3/8) = 18$

(b) $48 \times (1 - 3/8) = 30$

81. $90 - 65 = 25$

82. $2 \times 12 / 8 = 3$

83. (a) $10 + 4 + 5 = 19$

(b) $10 \times 4 \times 5 = 200$

84. $18 \times \frac{7}{9} = 14$

85. $65 \times 4 = 260$

86. $2 \times 50 = 100$

87. $31 / 2 + 0.5 = 16$

88. (a) $72 \times 5 / (5 + 4) = 40$

(b) $72 \times 4 / (5 + 4) = 32$

89. $2 \times 5 - 2 = 8$

90. $8 \times (9/6) = 12$

Answer Key

1. 4
 2. 5.07
 3. 9
 4. 23
 5. $728 \div 8 = 91$
 6. 12 cm
 7. 46
 8. $205 - 30 = 175$
 $175 - 25 = 150$
 $150 - 20 = 130$
 $130 - 15 = \boxed{115}$
 9. 0.68
 10. $14 \times 3 = 42$
 11. $4,128 - 1,839 = 2289$
 12. $8 \div 2 = 4$
Liz = $16 + 4 = \boxed{20}$
Melissa = $16 - 4 = \boxed{12}$
 13. $4:15 + 1:00 = 5:15$
 14. $1200 \times 3 + 1500 \times 2 = 3600 + 3000 = 6600$
 15. $463 + 48 = 511$
 16. $84 \div 3 = 28$ min
 17. $4/7$
 18. $3 \times 3 + 2 \times 2 = \13
 19. $20 - 3 \times 3 = \$11$
Ans = $\boxed{5}$ packs of paper
 20. 8
12 (A) & 5 (B) & 9 (C)
 21. $1 \frac{2}{3}$
 22. 45 min
 23. $4:45 - 50 = 3:55$
 24. 20
 25. $(15 - 14) + (13 - 12) + (11 - 10) + (9 - 8) + (7 - 6)$
 $= \boxed{5}$
 26. 10
 27. 14
 28. 320
 29. 9
 30. $90 - 42 = \boxed{48}^\circ$
 31. $100 \div 25 = 4$
 $20 \times 4 = 80$
 32. $4 \times 175 = 700$
 33. $\text{LCM}(8, 12) = 24$
 $24 \times 5 = 120$
 34. \$6.00
 35. $\boxed{6}$ times
See the record below. "T" means target and B means bull's eye.
- | | |
|---|---|
| 1 | |
| 2 | |
| 3 | T |
| 4 | B |
| 5 | |
| 6 | T |
- | | |
|----|---|
| 7 | |
| 8 | B |
| 9 | T |
| 10 | |
| 11 | |
| 12 | B |
36. $126 \div 7 = 18$ (weeks)
 37. $2 \times 12 = 24$
 $\frac{1}{2} \times 12 = 6$
 $24 + 6 = \boxed{30}$
 38. $8 \times 4 - 4 = 28$
 39. $22 + 17 = 39$
 $39 \div 3 = \boxed{13}$
 40. \$13
 41. 21
 42. $48 \div 4 = 12$ marbles
 43. 6
 44. 11 R 1
 45. 35
 46. 4
 47. 10
 48. $174 \div 3 = 58$ marbles
 49. 90
 50. 24
 51. 192
 52. 5
 53. 2
 54. 5.2
 55. 77
 56. 520
 57. 8.5
 58. 117
 59. 28
 60. 3.6
 61. {1, 7, 49 }
 62. {1, 5, 11, 55 }
 63. {1, 3, 17, 51 }
 64. {1, 3, 19, 57 }
 65. {1, 2, 4, 13, 26, 52 }

MAP 250 (T3) Issue 3

66. {1, 2, 4, 7, 8, 14, 28, 56 }
67. {1, 2, 3, 4, 6, 8, 12, 16, 24, 48 }
68. {1, 2, 3, 6, 9, 18, 27, 54 }
69. {1, 2, 5, 10, 25, 50 }
70. { 11, 13, 17, 19, 23, 29 }
71. $160 - 83 = 77$
72. $9 \times 7 = 63$
73. (a) $3 \times 4 = 12$
(b) $3 \times 5 = 15$
(c) $6 \times 3 = 18$
74. $3 \times 20 + 4 \times 30 = 180¢$
75. $20.00 - 4 \times 2.25 = 11$
76. $(22 + 18) / 2 = 20$
77. D
78. (a) $16 / 8 = 2$
(b) $42 / 6 = 7$
79. (a) 54 (b) 37 (c) H
80. (a) $27 \times (5/9) = 15$
(b) $27 \times (1 - 5/9) = 12$
81. $90 - 67 = 23$
82. $2 \times 14 / 4 = 7$
83. $(2 + 18) / 2 = 10$
84. $56 \times \frac{6}{7} = 48$
85. $30 \times 4 = 120$
86. $3 \times 55 = 165$
87. $35 / 2 + 0.5 = 18$
88. (a) $88 \times 5 / (5 + 6) = 40$
(b) $88 \times 6 / (5 + 6) = 48$
89. $2 \times 5 - 4 = 6$
90. $9 \times (28 / 7) = 36$

Answer Key

1. 0
2. 1.08
3. 136
4. 55
5. $90 - 60 = 30$
6. $10 \times 12 \div 8 = 15$
7. $180 \div 15 = 12$
8. $1.75 \times 3 = 5.25$
9. $33 - 1 = 32$
 $32 + 2 = 34$
 $34 - 1 = 33$
 $33 + 2 = 35$
 $35 - 1 = 34$
10. 35
11. $9 + 7.9 + 1.39 = \$28.29$
12. $\frac{1}{3} \times 15 = 5$ (red)
 $\frac{2}{3} \times 15 = 10$ (green)
13. $3,290 - 2,391 = 899$
14. $144 \times 2 = 288$
15. 616
16. 30 (days Dave)

Dave	Dan
25 days	5 days
26 days	6 days
27 days	7 days
28 days	8 days
29 days	9 days
30 days	10 days
17. $1600 - 200 = 1400$
 $1600 + 1400 = 3,000$ (mi)
18. $40 + 10 = 50$
19. $26 - 6 = 20$. $20 \div 2 = 10$ (girls)
 $10 + 6 = 16$ (boys)
20. 200, 210, 220, 230, 240, 250, 260, **270**, 280, 290, 300
 Ans = 270
21. $\frac{35}{100} = \frac{7}{20} = 7/20$
22. 3
23. $\square = 4$
24. 4
25. $\square = 35$
26. $\square = 60$
27. $\frac{3}{4} = 3/4$
28. $24 \times 60 = 1440$ min
29. $52 + 2 - 5 = 49$
30. $2 \times 0.75 = 1.5$
 $4 \times 0.75 = 3$
 $6 \times 0.75 = 4.5$
 Ans = 6 cans only
31. $1600 \div 8 = 200$
32. $20 \times 5 = 100$
 $120 - 100 = 20$
 $20 \div 10 = 2$ (dimes)
33. $80 + 10 = 90$
 $90 \div 2 = 45$
34. $31 \div 5 = 6R1$
 Ans = 7 boxes are needed
35. $3 \times 12 \times 0.3 = \10.80
36. $4:55 \text{ am} + 1:17 = 6:12 \text{ pm}$
37. Sat, Sun, Mon, Tue, Wed
 Wed - Sat = 4 days
 $2 \times 2 \times 2 \times 2 = 2^4 = 16$
 $6 \times 16 = 96$ inches
38. Tom = $5 + 2 = 7$ yrs old
 Sam = $3 \times 7 = 21$ yrs old
39. $20 \times 2 - 15 = 25$
40. 7
41. 80
42. 7
43. \div
44. 2.7
45. 42
46. 15
47. $\frac{4}{7}$
48. 24
49. $>$
50. 120
51. 13 & 3 (Remainder)
52. 104
53. 17.6
54. 13.8

MAP 250 (T3) Issue 4

55. 11
56. 228
57. 3
58. 9
59. 126
60. 7.6
61. {1, 3, 23, 69 }
62. {1, 2, 29, 58 }
63. {1, 2, 37, 74 }
64. {1, 5, 13, 65 }
65. {1, 3, 7, 9, 21, 63 }
66. {1, 2, 4, 17, 34, 68 }
67. {1, 2, 5, 7, 10, 14, 35, 70 }
68. {1, 2, 3, 6, 11, 22, 33, 66 }
69. {1, 2, 4, 8, 16, 32, 64 }
70. { 23, 29, 31, 37 }
71. $130 - 74 = 56$
72. $9 \times 7 = 63$
73. (a) $3 \times 5 = 15$
(b) $3 \times 6 = 18$
(c) $7 \times 3 = 21$
74. $3 \times 20 + 4 \times 30 = 180$
75. $20.00 - 4 \times 3.25 = 7$
76. $(14 + 8) / 2 = 11$
77. B
78. (a) $24 / 8 = 3$
(b) $42 / 6 = 7$
79. (a) 39 (b) 37 (c) H
80. (a) $10 \times (1/2) = 5$
(b) $10 \times (1 - 1/2) = 5$
81. $90 - 71 = 19$
82. $2 \times 15 / 10 = 3$
83. $(13 + 9) / 2 = 11$
84. $32 \times \frac{5}{8} = 20$
85. $35 \times 5 = 175$
86. $4 \times 60 = 240$
87. $59 / 2 + 0.5 = 30$
88. (a) $35 \times 5 / (5 + 2) = 25$
(b) $35 \times 2 / (5 + 2) = 10$
89. $2 \times 6 - 6 = 6$
90. $5 \times (24 / 8) = 15$

Answer Key

1. 7
2. 72
3. 8.85
4. 150
5. 18
6. $5 \times 27 = 135$
7. 28
8. $650 \div 50 = 13$
9. $1200 - (250 + 500) = 450$ (mi)
10. $12 \times 4 = 48$
11. $344 - 70 = 274$
 $274 - 60 = 214$
 $214 - 50 = 164$
 $164 - 40 = \boxed{124}$
12. 60
13. $3600 - 2300 = 1300$
14. 899
15. $210 \div 5 = 42$
16. $\frac{12}{20} = \frac{\boxed{3}}{5} = 3/5$
17. $37 + 260 = 297$
18. $366 \div 50 = 70$ R16
 $16 + 104 = 120$
 $120 \div 60 = \boxed{2}$
19. $\frac{1}{4} \times 12 = 3$ (red)
20. 9
21. 0.0024
22. $\square = 3$
23. 40500
24. 16
25. 145
26. $\frac{75-25}{2} = 12\frac{1}{2} = 12 \text{ } 1/2$
27. $7 \times 60 = 420$
 $\frac{1}{2} \times 60 = 30$
 $420 + 30 = \boxed{450 \text{ min}}$
28. $1/6$
29. $\frac{65}{4} = \boxed{16\frac{1}{4}} = 16 \text{ } 1/4$
30. 50 times
31. $(50 + 70) \times 10 = 1200$
32. $10 + 5 = 15$
 $120 \div 15 = 8$
 $2 \times 8 = \boxed{16}$
33. $11:30 - 1:45 = 9:45$ am
34. $\frac{300}{24} = \frac{25}{2} = 12.5 = 12 \text{ min } \& \text{ } 30 \text{ sec}$
35. Four years ago, Kirk was 6 and Jake was 12.
 Jake = 16 now
36. Sam: 18
 Lee: 9
 Pat: $(9 - 1) \div 4 = \boxed{2}$
37. Nancy = 10
 Maria = 6
 $6 - 3 = \boxed{3}$
38. $20 - 5 = 15$
 $20 + 15 = \boxed{35}$
39. $75 = 3 \times 25 = 5 \times 15 = \dots$, thus they are 5 and 15.
 Ans = 15
40. 41
 2 in (A) & 10 in (B) & 3 in (C) & 7 in (D)
41. 96
42. 90
43. 7
44. 20
45. 135
46. 4
47. 6:50 P.M.
48. 160
49. 29
50. 128
51. 19
52. 2
53. 42
54. 55
55. 5
56. 6
57. 80
58. 3
59. 352
60. 420
61. {1, 2, 41, 82 }
62. {1, 3, 29, 87 }
63. {1, 5, 17, 85 }
64. {1, 2, 43, 86 }
65. {1, 3, 9, 27, 81 }
66. {1, 3, 5, 15, 25, 75 }
67. {1, 2, 4, 19, 38, 76 }
68. {1, 2, 3, 6, 13, 26, 39, 78 }
69. {1, 2, 4, 5, 8, 10, 16, 20, 40, 80 }
70. { 31, 37, 41, 43, 47 }

MAP 250 (T3) Issue 5

71. $140-108 = 32$
72. $10 \times 7 = 70$
73. (a) $3 \times 6 = 18$
(b) $3 \times 7 = 21$
(c) $8 \times 3 = 24$
74. $2 \times 30 + 5 \times 40 = 260¢$
75. $20.00 - 4 \times 4.75 = 1$
76. $(14+10)/2 = 12$
77. B
78. (a) $32/8 = 4$
(b) $45/9 = 5$
79. (a) 54 (b) 52 (c) H
80. (a) $10 \times (1/5) = 2$
(b) $10 \times (1 - 1/5) = 8$
81. $90 - 75 = 15$
82. $2 \times 16/8 = 4$
83. $(17+5)/2 = 11$
84. $32 \times \frac{7}{8} = 28$
85. $40 \times 2 = 80$
86. $5 \times 65 = 325$
87. $33/2 + 0.5 = 17$
88. (a) $72 \times 5 / (5+7) = 30$
(b) $72 \times 7 / (5+7) = 42$
89. $2 \times 6 - 8 = 4$
90. $2 \times (54/9) = 12$

Answer Key

1. 12
2. 6
3. 52
4. 3.38
5. 12
6. Method I)
 $40 - 8 = 32$
 $32 \div 2 = 16$ (Tim)
 $16 + 8 = 24$ (Sam)
- Method II)
 $40 \div 2 = 20$
 $8 \div 2 = 4$
 $20 + 4 = 24$ (Sam)
7. $32 \times 2.5 = 320 \times \frac{1}{4} = 80$
8. 50 (mph)
9. $12 \times 5 \times 4 = 240 \text{ in}^3$
10. $24 \times 4 = 96$
11. $12 \times 80 = 960$ (lb)
 $1200 - 960 = 240$ (lb)
12. $42 - 2 = 40$
 $40 - 4 = 36$
 $36 - 6 = 30$
 $30 - 8 = 22$
13. 8,749
14. $947.6 - 289.9 = 657.7$
15. $23.95 + 17.23 + 76.82 = 118$
16. $1200 \times 5 = 6000$
17. $60 \div 5 = 12$
18. $55 \div 5 = 11$
19. $500 \div 2 = 250$
20. Method I)
 $200 - 100 = 100$
 $100 - 38 \times 2 = 24$
- Method II)
 $200 - 38 - (100 + 38) = 24$
21. .375
22. $(560 - 500) \div 5 - 1 = 11$
23. $\frac{5}{8} = 5/8$
24. $\frac{7}{8} = 7/8$
25. 123.4
26. 20
27. $200 \div 9 = 22\text{R}2$
 Ans = 22 & 2 (R)
28. 240
29. 112
30. $5 \times 12 = 60$
 $60 - 4 = 56$
 $56 \div 7 = 8$ weeks
31. $50 + 10 = 60$
 $60 \div 2 = 30$
32. $8:20 \text{ am} + 2:50 = 11:10 \text{ am}$
33. $12,436 + 10,658 = 23,094$
34. $8 \times 2 = 16$
35. C
 $24 \div 7 = 3\text{R}3$
 Monday - 3 = Friday
36. $12 \times (3 + 4 + 5) = 144$
37. $137 - 122 = 15$
 $15 \div 5 = 3$ nickels
38. $100 + 8 \times (16 - 10) = 148 \text{ cm}$
39. $4 \times 6 = 24$
 $4 + 6 = 10$
40. 30
 8 in (A) & 10 in (B) & 7 in (C) & 5 in (D)
41. 103, 105, 107, 109
42. 6
43. 10
44. 42
45. 6
46. $5 \times 12 = 60$
 $60 + 3 = 63$
47. 60
48. 150
49. 2 R 6
50. 8 R 2
51. 66
52. 28
53. 36
54. 2 & 6 (Remainder)
55. 6
56. 12.3
57. 80
58. 360
59. 30.8
60. 20
61. {1, 5, 19, 95 }
62. {1, 7, 13, 91 }
63. {1, 3, 31, 93 }

MAP 250 (T3) Issue 6

64. {1, 2, 7, 14, 49, 98 }
65. {1, 2, 4, 23, 46, 92 }
66. {1, 3, 9, 11, 33, 99 }
67. {1, 2, 3, 6, 17, 34, 51, 102 }
68. {1, 2, 4, 8, 11, 22, 44, 88 }
69. {1, 2, 4, 5, 10, 20, 25, 50, 100 }
70. { 41, 43, 47, 53, 59 }
71. $160 - 84 = 76$
72. $10 \times 7 = 70$
73. (a) $3 \times 7 = 21$
(b) $3 \times 8 = 24$
(c) $9 \times 3 = 27$
74. $3 \times 40 + 6 \times 50 = 420\text{¢}$
75. $20.00 - 5 \times 2.00 = 10$
76. $(22 + 2) / 2 = 12$
77. B
78. (a) $40 / 8 = 5$
(b) $48 / 6 = 8$
79. (a) 52 (b) 53 (c) J
80. (a) $10 \times (3/5) = 6$
(b) $10 \times (1 - 3/5) = 4$
81. $90 - 77 = 13$
82. $2 \times 16 / 4 = 8$
83. $(9 + 15) / 2 = 12$
84. $18 \times \frac{2}{3} = 12$
85. $45 \times 3 = 135$
86. $2 \times 70 = 140$
87. $63 / 2 + 0.5 = 32$
88. (a) $1^2 = 1$
(b) $2^2 = 4$
(c) $3^2 = 9$
89. $2 \times 7 - 10 = 4$
90. $3 \times (6 / 2) = 9$

Answer Key

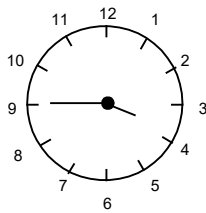
1. 2
2. 52
3. 15
4. 5.25
5. $2 \times 0.75 = 1.5$
 $4 \times 0.75 = 3$
 $6 \times 0.75 = 4.5$
Ans = 6 cans only
6. $282 \div 2 = 141$
 $480 \div 3 = 160$
 $160 - 141 = 19$ mi
7. $15 \times 2 = 30$
 $30 - 12 = 18$
8. $512 - 22 = 490$
 $490 - 33 = 457$
 $457 - 44 = 413$
 $413 - 55 = 358$
 $358 - 66 = 292$
 $292 - 77 = 215$
9. $321 \times 2 + 10 = 642 + 10 = 652$
10. $617 - 523 = 94$
11. $99.75 + 79 = 178.75$
12. $8 \times 5.4 = \$43.20$
13. $15 \times 8 = 120$
 $120 - 110 = 10$
14. $20 \div 5 = 4$
 $8 \times 4 = 32$
15. $L = M + 2$
 $L = S + 8$
 $50 + 10 = 60$
 $60 \div 3 = 20$ (L)
16. $946 - 375 = 571$
17. $1/5$
18. 4
19. $84 + 68 + 76 = 228$ in
20. $250 \div 5 = 50$ mph
21. 150
22. $\square = 7$
23. $\square = 6$
24. $\frac{1}{3} = \frac{5}{15}$
 $1 \times 15 + 5 = 20$
25. $\square = 80$
26. 12
27. 13
28. $\frac{5}{6} = 5/6$
29. $\frac{2}{3} = 2/3$
30. 50
31. $3 \times 12 \div 2 = 18$ inches
32. $10 + 20 = 30$
 $20 + 30 = 50$
33. $21 \div 0.3 = 70$
34. $27 \div 3 = 9$ yd
35. $6 \times 4 \times 2.25 = \54
36. $24 - 6 = 18$
 $18 \div 2 = 9$
 $9 - 3 = 6$ yrs old
37. $3(3 + 5 + 7) = 45$
38. 4 hr & 50 min
39. $5.00 + 4(3.00) = \$17.00$
40. 23
3 in (A) & 10 in (B) & 6 in (C) & 4 in (D)
41. $18:15 - 8:15 = 10:00 = 10$ hours
42. $2 \times 25 = 50 = 5 \times 10$
43. 7 R 1
44. 60
45. 38
46. 2.5
47. 106
48. 38
49. 80
50. $9:15 - 7:30 = 1:45 = 1$ hour 45 min
51. 2
52. 7
53. 216
54. 100
55. 12
56. 12.8
57. 384
58. 2
59. 12.8
60. 20
61. {1, 5, 23, 115 }
62. {1, 3, 37, 111 }
63. {1, 3, 9, 13, 39, 117 }
64. {1, 2, 4, 29, 58, 116 }
65. {1, 2, 3, 6, 19, 38, 57, 114 }
66. {1, 3, 5, 7, 15, 21, 35, 105 }
67. {1, 2, 4, 7, 8, 14, 16, 28, 56, 112 }

MAP 250 (T3) Issue 7

68. {1, 2, 5, 10, 11, 22, 55, 110 }
69. {1, 2, 4, 8, 13, 26, 52, 104 }
70. { 53, 59, 61, 67 }
71. $150 - 51 = 99$
72. $56 + 55 = 111$
73. (a) $3 \times 8 = 24$
(b) $3 \times 9 = 27$
(c) $2 \times 4 = 8$
74. $4 \times 50 + 2 \times 20 = 240¢$
75. $20.00 - 5 \times 3.00 = 5$
76. $(22 + 4) / 2 = 13$
77. D
78. (a) $48 / 8 = 6$
(b) $42 / 6 = 7$
79. (a) 37 (b) 38 (c) J
80. (a) $12 \times (1/6) = 2$
(b) $12 \times (1 - 1/6) = 10$
81. $90 - 84 = 6$
82. $2 \times 18 / 4 = 9$
83. $(10 + 24) / 2 = 17$
84. $22 \times \frac{1}{2} = 11$
85. $50 \times 4 = 200$
86. $3 \times 75 = 225$
87. $47 / 2 + 0.5 = 24$
88. (a) $1^2 = 1$
(b) $2^2 = 4$
(c) $3^2 = 9$
89. $2 \times 7 - 2 = 12$
90. $4 \times (12/3) = 16$

Answer Key

1. 6
2. $45 + 450 = 495$
3. 33
4. 31
5. $45 \div 5 = 9$ mi
6. $384 + 267 = 651$
7. 6 (cans)
8. $1\frac{1}{2} = 3 \times \frac{1}{2}$
 $3 \times 10 = \boxed{30}$
9. $3:10 + 0:35 = 3:45$



10. $477 + 524 = 1001$
11. $56 - 2 = 54$
 $54 - 4 = 50$
 $50 - 8 = 42$
 $42 - 16 = \boxed{26}$
12. $99999 - 40 = 99959$
13. $42 \times 9 = 378$
14. $23 + 39 + 28 = 90$
15. $8 \times 1.5 = \$12.00$
16. 2300 gal
17. $2300 \times 4 = 9200$ gal
18. $18 - 9 - 7 = 2$
19. $(100-20)/2 = 40$ (the smaller)
 $40 + 20 = 60$ (the larger)
 $40 \times 60 = 2400$
20. $120 - 10 = 110$
 $110 \div 2 = 55$
 $55 + 10 = \boxed{\$65.00}$
21. 24
22. $\frac{3}{4} \times 16 = 12$ oz
23. $\frac{1}{20} = 1/20$
24. $\square = 108$
25. 40
26. 10,000,000
27. 2005
28. 10 quarters
29. $\square = 80$

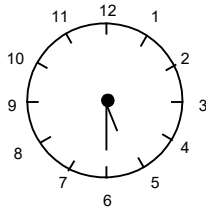
30. $\frac{4}{7} = 4/7$
31. 7 quarters = \$1.75
 $7 \times 3 = \boxed{21}$
32. $10 - 2.3 \times 3 = 10 - 6.9 = \3.10
33. $300 \div 15 = \boxed{20}$
34. B
 $90 \div 12 = 7R6$
 $7 + 1 = 8$
It should be Sunday.
35. $2 \times 4 \times 10 = 80$
36. $2(1:45) = 2:90 = 3:30$
 $9:35 + 3:30 = 13:05 = 1:05$ pm
37. $1200 \times 5 = 6000$
38. $8 \times .5 = 4$
 $5 - 4 = \$1.00$
39. $576 \div 4 = 144$ inches = 12 ft (each side)
 $12 \div 3 = 4$
 $4 \times 4 = \boxed{16 \text{ yd}^2}$
40. 23
8 in (A) & 7 in (B) & 3 in (C) & 5 in (D)
41. 800
42. 5 dimes = 2 quarters
20 dimes = 8 quarters
43. D
 $7 \times 2 = 14$
 $2 + 14 = 16$
July 16
44. 32
45. 49
46. 27
47. $5:45 - 4:30 = 1:15 = 1$ hour and 15 min
48. $12:15 - 1:45 = 10:30 = 10$ hours and 30 min
49. 8
50. 1
51. 120
52. 9.6
53. 144
54. 6
55. 83 & 1 (Remainder)
56. 84
57. 2
58. 10
59. 174
60. 2
61. {1, 11, 121 }

MAP 250 (T3) Issue 8

62. {1, 3, 41, 123 }
63. {1, 2, 59, 118 }
64. {1, 2, 61, 122 }
65. {1, 3, 43, 129 }
66. {1, 5, 25, 125 }
67. {1, 7, 17, 119 }
68. {1, 2, 5, 10, 13, 26, 65, 130 }
69. {1, 2, 4, 31, 62, 124 }
70. {1, 2, 4, 8, 16, 32, 64, 128 }
71. $140 - 58 = 82$
72. $58 + 66 = 124$
73. (a) $3 \times 9 = 27$
(b) $4 \times 2 = 8$
(c) $3 \times 4 = 12$
74. $5 \times 20 + 3 \times 30 = 190¢$
75. $30.00 - 5 \times 4.00 = 10$
76. $(20 + 6) / 2 = 13$
77. D
78. (a) $56 / 8 = 7$
(b) $49 / 7 = 7$
79. $4 \times 1 + 2 \times 1 = 6$
80. (a) $12 \times (5 / 6) = 10$
(b) $12 \times (1 - 5 / 6) = 2$
81. $90 - 62 = 28$
82. $2 \times 18 / 12 = 3$
83. $(20 + 12) / 2 = 16$
84. $14 \times \frac{4}{7} = 8$
85. $55 \times 5 = 275$
86. $4 \times 30 = 120$
87. $45 / 2 + 0.5 = 23$
88. (a) $2^2 = 4$
(b) $3^2 = 9$
(c) $4^2 = 16$
89. $2 \times 8 - 4 = 12$
90. $5 \times (12 / 4) = 15$

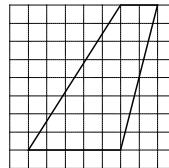
Answer Key

1. 3
2. 132
3. 13.55
4. 4.82
5. 732
6. $45 \times 2 = 90$
7. $34 \times 5 = 170$
8. $17 - 9 = 8$
9. 15
10. D
11. $150 \times 10 = 1500$
12. 70 (min)
13. $4:45 + 0:45 = 5:30$



14. $760 - 100 = 660$
 $660 - 120 = 540$
 $540 - 140 = 400$
 $400 - 160 = 240$
 $240 - 180 = \boxed{60}$
15. $100,000 + 5,000 = 105,000$
16. $4 \times 4.25 = \$17$
17. $4:50 + 0:30 = 5:20$
18. $9 \div 1.5 = \boxed{6 \text{ tickets}}$
19. 2000
20. $2 \times 6540 = \boxed{13080}$
21. 0.0075
22. 5,000,067,900
23. $48 + 8 = 56$
24. \$20
25. 20,000
26. 9
27. $(3^3)^3 = 3^9$
 $\square = 9$
28. $7\frac{1+4}{8} = 7\frac{5}{8} = 7 \frac{5}{8}$
29. 4
30. $\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$
 $\frac{5}{6}(5280) = 5 \times 880 = \boxed{4400}$

31. $(7 - 3) - (5 - 3) = 7 - 5 = 2$
32. $10 + 8 = 18$
 $18 + 6 = \boxed{24 \text{ (yrs old)}}$
33. $20 - 2 \times 4 = 12$
34. $3.5 \div 5 = \$0.70$
35. Method I)
 $65 - 25 = 40$
 $40 \div 2 = \boxed{\$20.00}$
- Method II)
 $(65 + 25) \div 2 = 45$
 $65 - 45 = \$20.00$
36. $2 \times 16 + 8 = 40 \text{ (oz)}$
 $4.00 \div 40 = \$0.10$
37. $28 \div 2 = 14$
38. top = 2
base = 5
height = 8
area = $\frac{1}{2}(2+5)(8) = \boxed{28}$



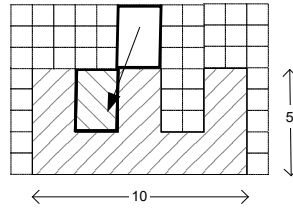
39. $10 - 5 + 10 = 15$
40. $40 \div 2 = 20$
 $20 - 11 = \boxed{9}$
41. 22.4
42. 66
43. 8
44. 35
45. 9
46. $13:45 - 2:15 = 11:30 = 11 \text{ hr } 30 \text{ min}$
47. 35
48. 125
49. 36
50. $11:15 - 7:30 = 3:45 = 3 \text{ hours } 45 \text{ min}$
51. 7.2
52. 3
53. 45
54. 25
55. 4.4
56. 20
57. 5
58. 4.8

MAP 250 (T3) Issue 9

59. 6
60. 960
61. {1, 2, 4 }
62. {1, 3, 9 }
63. {1, 2, 5, 10 }
64. {1, 3, 5, 15 }
65. {1, 2, 7, 14 }
66. {1, 2, 3, 6 }
67. {1, 2, 4, 8 }
68. {1, 2, 4, 8, 16 }
69. {1, 2, 3, 6, 9, 18 }
70. {1, 2, 3, 4, 6, 12 }
71. $170 - 59 = 111$
72. $57 + 51 = 108$
73. (a) $4 \times 2 = 8$
(b) $4 \times 3 = 12$
(c) $4 \times 4 = 16$
74. $6 \times 30 + 4 \times 40 = 340$
75. $30.00 - 6 \times 2.50 = 15$
76. $(20 + 8) / 2 = 14$
77. C
78. (a) $64 / 8 = 8$
(b) $54 / 6 = 9$
79. $4 \times 1 + 2 \times 2 = 8$
80. (a) $28 \times (1/7) = 4$
(b) $28 \times (1 - 1/7) = 24$
81. (a) $(2 + 7) \times 2 = 18$
(b) $2 \times 7 = 14$
82. $2 \times 20 / 10 = 4$
83. $(34 + 16) / 2 = 25$
84. $20 \times \frac{2}{5} = 8$
85. $60 \times 2 = 120$
86. $5 \times 35 = 175$
87. $19 / 2 + 0.5 = 10$
88. (a) $3^2 = 9$
(b) $4^2 = 16$
(c) $5^2 = 25$
89. $2 \times 8 - 6 = 10$
90. $6 \times (30 / 5) = 36$

Answer Key

1. 10
2. 84
3. 184
4. 30 (nickels)
5. 6
6. $\frac{1}{4}$
7. $800 - 220 = 580$
8. $\frac{1}{5}$
9. $165 \times 5 = 825$
10. $12.89 + 2 \times 28.53 = 69.95$
11. C
12. $3 \times 5 + 8 = 23$
13. 617,502
14. $11:30 + 0:45 = 12:15$
15. $123 + (123 - 48) = 198$
16. $50 - 8 \times 2.5 - 5 \times 8 = \boxed{26}$
17. $37 \times 40 = 1480$
18. $14 \times 8 = 112$
19. 12
20. $2.40 \div 3 = 0.8$ (an apple)
 $2 \times 0.8 = 1.6$
 $3.70 - 1.60 = 2.10$
 $2.10 \div 3 = \boxed{\$0.70}$
21. B
22. 82
23. 1,002,304
24. $4 \frac{1}{16}$
25. $(10+20+30+40) - (9+19+29+39)$
 $= (10 - 9) + (20 - 19) + (30 - 29) + (40 - 39)$
 $= 4$
26. $10 + 1 = \boxed{11}$
27. 8
28. True
29. $53 \times 3 - 43 \times 3 = 10 \times 3 = 130$
30. 8 quarters = \$2 = 20 dimes
31. $36 = 6 \times 6$
 $4 \times 6 = 24$
 $24 \div 3 = \boxed{8 \text{ in}}$
32. $17 - 5 = 12$
 $12 \div 2 = \boxed{6 \text{ yrs old}}$
33. $8 + 7 + 6 = \boxed{21}$
34. 6
35. 24 yrs old
36. Jon = 10
 Ken = 20
37. 1 yard = 3 feet = 36 in
 $36 - 1 = \boxed{35 \text{ cuts}}$
38. In three years,
 P = 30, Q = 10
 At present,
 P = 27, Q = 7
39. $0.4 \times 5 = 2$
 $4.4 - 2 = 2.4$
 $2.4 \div 2 = \boxed{\$1.20}$
40. $10 \times 5 - 3 \times 2 = 44$



41. 121
42. 135
43. 14
44. 4.35
45. >
46. 3
47. 210
48. 6 R 1
49. 356
50. 90
51. 17
52. 168
53. 10
54. 1080
55. 36.8
56. 110
57. 6 & 4 (Remainder)
58. 150
59. 3
60. 11
61. 5 & 32
62. $50 \times 20 = 1000$
63. 50
64. $2 \times (12.95 - 3.95) = 2 \times 9 = 18$
65. 5
66. 65

MAP 250 (T3) Issue 10

67. $\square = 5$
68. A
69. C
70. $12 \div 3 = 4$
 $4 \times 2.5 = \boxed{\$10.00}$
71. $120 - 72 = 48$
72. $63 + 63 = 126$
73. (a) $4 \times 3 = 12$
(b) $4 \times 4 = 16$
(c) $5 \times 4 = 20$
74. $2 \times 40 + 5 \times 50 = 330\text{¢}$
75. $30.00 - 6 \times 3.50 = 9$
76. $(18 + 10) / 2 = 14$
77. C
78. (a) $72 / 8 = 9$
(b) $54 / 9 = 6$
79. $4 \times 1 + 2 \times 3 = 10$
80. (a) $21 \times (2/7) = 6$
(b) $21 \times (1 - 2/7) = 15$
81. (a) $(2 + 8) \times 2 = 20$
(b) $2 \times 8 = 16$
82. $2 \times 21 / 3 = 14$
83. $(26 + 34) / 2 = 30$
84. $21 \times \frac{1}{3} = 7$
85. $65 \times 3 = 195$
86. $2 \times 40 = 80$
87. $61 / 2 + 0.5 = 31$
88. (a) $4^2 = 16$
(b) $5^2 = 25$
(c) $6^2 = 36$
89. $2 \times 9 - 8 = 10$
90. $7 \times (18 / 6) = 21$