Answer Key

1. C
   This is an alternating addition series, with a random number, 35, interpolated as every third number. The pattern of addition is to add 2, add 5, add 2, and so on. The number 35 comes after each "add 2" step.

2. D
   In this addition series, 1 is added to the first number; 2 is added to the second number; 3 is added to the third number; and so forth.

3. C
   The letters decrease by 1; the numbers are multiplied by 2.

4. B
   In this series, the letters progress by 2, and the numbers increase by 2.

5. D
   There are three series to look for here. The first letters are alphabetical in reverse: Z, Y, X, W, V. The second letters are in alphabetical order, beginning with A. The number series is as follows: 5, 4, 6, 3, 7.

6. E
   This is an alternating subtraction series, which subtracts 5, then 2, then 5, and so on.

7. E
   4, 7, 26, 10, 13, 20, 16, 19, 14

8. A
   -3

9. D
   +7

10. D
    -4

11. B
    This is an alternating addition and subtraction series. Roman numbers alternate with Arabic numbers. In the Roman numeral pattern, each number decreases by 1. In the Arabic numeral pattern, each number increases by 1.

12. A
    This is a simple subtraction series. Each number is 35 less than the previous number.

13. B
    This is a simple alternating addition and subtraction series. The first series begins with 8 and adds 3; the second begins with 43 and subtracts 2.

14. C
    3, 8, 13, 18, 23, 28, 33,
      -5   -5

15. D
    +5

16. A
    The middle letters are static, so concentrate on the first and third letters. The series involves an alphabetical order with a reversal of the letters. The first letters are in alphabetical order: F, G, H, I, J. The second and fourth segments are reversals of the first and third segments. The missing segment begins with a new letter.

17. D
    $26 - 3 = 23$
    $23 - 3 = 20$

18. B
    $\quad\quad +12 \quad\quad +24$
    14, 28, 20, 40, 32, 64, 56
    $\quad\quad +6 \quad\quad +12 \quad\quad +24$

19. E
    9, 12, 11, 14, 13, 16, 15, 18, 17

20. D
    The second and forth letters in the series, L and A, are static. The first and third letters consist of an alphabetical order beginning with the letter E.

21. D
    With unknown length of time, we cannot determine the distance

22. B

23. C
    $8 \times 7.5 = 7\frac{1}{2} \times 8..$

24. A

25. A

26. A
    $(-\frac{1}{2})^3 = -\frac{1}{8} < (-\frac{1}{3})^2 = \frac{1}{9}$

27. C

28. C

29. B
    $40 \times \frac{3}{4} = 30 > 42 \times \frac{2}{3} = 28$

30. C

31. B

32. A

33. A
    $\frac{1}{3} - \frac{1}{4} > 0$
    $\frac{1}{6} - \frac{1}{5} < 0$
    So,
    $\frac{1}{3} - \frac{1}{4} > \frac{1}{6} - \frac{1}{5}$
    $\frac{1}{3} + \frac{1}{5} > \frac{1}{4} + \frac{1}{6}$

34. C

GT5

35. C
36. A
37. A
38. A
   $\angle ADC = 50°$
   $\angle CAD = 60°$
39. B
40. A
41. E
42. E
43. B
44. D
45. C
46. C
47. E
48. C
49. A
50. D
51. E
52. E
53. D
54. E
55. C
56. B
57. E
58. D
59. A
60. B
61. C
62. E
63. B
64. B
65. A
66. C
67. D

68. A
69. C
70. B
71. D
72. C
73. B
74. D
75. B
76. D
77. C
78. D
79. A
80. B
81. A
82. C
83. A
84. D
85. A
86. C
87. D
88. A
89. C
90. B
91. D
92. B
93. C
94. C
95. D
96. C
97. C
98. D
99. D
100. B
101. E

GT5