Answer Key

1. 11
2. 13
3. 11
4. 19
5. 32
6. 6
   60
   6
   60
7. 7
   70
   7
   70
8. 8
   80
   8
   80
9. 9
   90
   9
   90
10. 4
    40
    4
    400
11. 0.012
12. 0.12
13. 0.01
14. 0.008
15. 0.04
16. 0
17. 25
18. 9
19. 1
20. 7
21. 11/28
    LCD = 28
22. 5/12
    LCD = 12
23. 5/24
    LCD = 24
24. 9/20
    LCD = 20
25. 17/144
    LCD = 144
26. 33
27. 15
28. 33
29. 64
30. 14
31. 1 2/3
32. 45 min
33. 4:45 - 50 = 3:55
34. 20
35. (15 - 14) + (13 - 12) + (11 - 10) + (9 - 8) + (7 - 6) = 5
36. 10
37. 14
38. 320
39. 9
40. 90 - 42 = 48°
41. 100÷25 = 4
    20×4 = 80
42. 4×175 = 700
43. LCM(8, 12) = 24
    24×5 = 120
44. $6.00
45. 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

46. 126÷7 = 18 (weeks)
47. 2×12 = 24
    $\frac{1}{2}$×12 = 6
    24 + 6 = 30
48. 8 × 4 - 4 = 28
49. 22 + 17 = 39
    39÷3 = 13
50. $13
51. 25%
52. 50%
53. 75%
54. 20%
55. 40%
56. 60%

57. 80%
58. 2/5
59. $24\times\frac{7}{8} - 6 = 15$
60. $\frac{1}{4} = 0.25 = 25\%$
61. D
62. $2^3 = 8$
    $8\times20 = 160\ cm^3$
63. $75\%\times28 = \frac{3}{4}\times28 = 21$
64. # games = 28 + 22 = 50
    # wins = 21 + 14 = 35
    percent winning = $\frac{35}{50}$= 0.7 = 70%
65. 28 + 22 + 40 = 90
    $90\times80\% = 90\times0.8 = 72$
    72 - (21 + 14) = 72 - 35 = 37
66. Method I)
    Let there be x boys and $11 - x$ girls.
    $3(11 - x) > x$
    So, $33 > 4x$ or $\frac{33}{4} > x$

    $2x > 5(11 - x)$
    So, $7x > 55$ or $x > \frac{55}{7}$

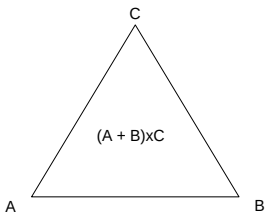
    Now, $\frac{33}{4} > x > \frac{55}{7}$
    x must be 8.

    Method II)
    Try and error: 1 girl and 10 boys, 2 girls and 9 boys, etc.
    Ans = 3 girls & 8 boys
67. $\frac{\text{discount}}{\text{original price}} = \frac{10}{50} = 20\%$
68. Update the given information on the decision table as below.

	brown	blue	red	purple
Patty	×			
Jenna	×	×		
Matt		×	✓	
Tom			×	

    Cross (×) and check (✓) the remaining cells.

	brown	blue	red	purple
Patty	×	✓	×	×
Jenna	×	×	×	✓
Matt	×	×	✓	×
Tom	✓	×	×	×

    Matt's favorite color is red.
    Jenna's favorite color is purple.
    Patty's favorite color is blue.
    Tom's favorite color is brown.
    (a) T (b) P (c) M (d) J
69. $120\times60\% = 120\times0.6 = 72$ lb
70. 

    (1 + 2)×5 =15