33. In all others, both crossed lines are equal.

34. In all others, the both designs are same and outer design converted into dark one.

35. In all others, lines are making designs.

41. In the successive figure, one design is added with a line.

42. In the figure, designs come near and adjoining to each other.

43. The first problem figure has four sides and the second problem figure three sides with same figure inside. Such the question figure should have four sides in place of five sides with same figure inside.

44. From first figure to second figure, the enclosed unit becomes outer unit and the outer unit get enclosed.

45. In the figures, the inner designs are omitting.

51.

2	42, 70, 98, 126
3	21, 35, 49, 63
7	7, 35, 49, 21
	1, 5, 7, 3

$\therefore$ LCM $= 2 \times 3 \times 7 \times 5 \times 7 \times 3 = 4410$

52. $\because$ 1 m = 100 cm

$\therefore$ 4 m = 400 cm

Now, 400 cm + 2604 cm = 3004 cm

53. 2 months, 5 weeks and 18 days

$= 2 \times 30 + 5 \times 7 + 18$

$= 60 + 35 + 18 = 113$ days

54. Smallest four digit number = 1000

55. $\because$ Place values of two 7s in 27307 are

$= 7000$ and 7

$\therefore$ Difference $= 7000 - 7 = 6993$

56. 83 is a prime number.

57. $\because$ Multiples of 7 between 14 and 77

$= 21, 28, 35, 42, 49, 56, 63, 70$

So, total numbers of multiples are 8.

58. The numbers divisible by 25 are only the numbers with last digit 25, 50, 75 and 100. So, 5 is required number.

59. $\because$ The sum $= 975 + 983 + 923 + 913 + 985$

$= 4779$

$\therefore$ In nearest hundred, it will be written as 4800.

60. Eighty thousand nine hundred and five = 80905

61. $\because$ Other number $= \dfrac{\text{HCF} \times \text{LCM}}{\text{First number}} = \dfrac{4 \times 48}{12} = 16$

62. $\dfrac{6}{20}$ in percentage $= \dfrac{6}{20} \times \dfrac{100}{1} = 30\%$

63. Average height of the students

$= \dfrac{30 + 40 + 50 + 60 + 70}{5} = \dfrac{250}{5} = 50$

64. $\because$ 1 kg wheat costs = ₹ 6

$\therefore$ 8 kg wheat cost $= 8 \times 6 =$ ₹ 48

6 kg rice cost = ₹ 48

1 Kg rice costs $= \dfrac{48}{6} =$ ₹ 8

65. Cost price $= 24 \times 10 =$ ₹ 240

Sale price $= 36 \times 10 =$ ₹ 360

Profit $= 360 - 240 =$ ₹ 120

66. $\because$ Factors of 316 are 1×316, 2×158 and 4×79.
(1, 2, 4, 79, 158, 316)

$\therefore$ 8 is not a factor of 316.

67. Total score in first two matches $= 2 \times 27 = 54$

Total score in other three matches

$= 3 \times 32 = 96$

$\therefore$ Average of 5 matches $= \dfrac{54 + 96}{5} = 30$

68. Percentage of girls $= \dfrac{240}{600} \times 100 = 40\%$

69. SI $= \dfrac{P \times R \times T}{100} = \dfrac{1800 \times 10 \times 10}{100} =$ ₹ 1800

70. CP of the radio = ₹ 900

SP of the radio = ₹ 1200

Profit $= 1200 - 900 =$ ₹ 300

$\therefore$ Profit per cent $= \dfrac{300}{900} = 100$

$= 33\dfrac{1}{3}\%$

71. The series consists of prime numbers.

$\therefore$ The missing number is the next prime number which is 43.

72. $10\dfrac{2}{5} \times 8\dfrac{4}{5} \div 4\dfrac{2}{5} = \dfrac{52}{5} \times \dfrac{44}{5} \div \dfrac{22}{5}$

$= \dfrac{52}{5} \times \dfrac{44}{5} \times \dfrac{5}{22} = \dfrac{52}{5} \times 2 = \dfrac{104}{5} = 20\dfrac{4}{5}$

73. $[\{(6 \div 2) \times 3\} \times 2] = [\{3 \times 3\} \times 2] = [9 \times 2] = 18$

74. Sum of the fraction $= \dfrac{2}{9} + \dfrac{4}{3} + \dfrac{6}{18}$

$= \dfrac{4 + 24 + 6}{18} = \dfrac{34}{18} = \dfrac{17}{9}$

75. $\because 20.91 \div 0.17 = \dfrac{2091}{100} \times \dfrac{100}{17} = 123.0$