Passage V

In a city, there lived a mother with her little daughter. One day they went to a toy shop. The girl saw a beautiful blue ball. The mother bought the ball for the girl. The girl was very happy. One day the girl was playing with the ball in the courtyard. The ball bounced very high and fell into the window of the neighbours. The ball hit the flower vase which was very costly. It was broken into pieces. The woman in that house shouted and the little girl was frightened.

96. How many persons are there in the story?
(1) One (2) Two
(3) Three (4) Many

97. What did the girl want?
(1) A beautiful doll
(2) A big toy
(3) A gift
(4) A blue ball

98. What was broken into pieces?
(1) The ball (2) the window
(3) The flower vase (4) the glass

99. The girl was frightened because
(1) she lost the ball
(2) the woman shouted
(3) her mother was angry
(4) she was beaten

100. Where was the little girl live?
(1) At a town
(2) In a city
(3) At a village
(4) In other country

Answers

1.	(2)	**2.**	(3)	**3.**	(3)	**4.**	(3)	**5.**	(2)	**6.**	(2)	**7.**	(2)	**8.**	(3)	**9.**	(2)	**10.**	(1)
11.	(2)	**12.**	(4)	**13.**	(1)	**14.**	(1)	**15.**	(2)	**16.**	(1)	**17.**	(3)	**18.**	(2)	**19.**	(4)	**20.**	(1)
21.	(3)	**22.**	(4)	**23.**	(4)	**24.**	(1)	**25.**	(1)	**26.**	(1)	**27.**	(4)	**28.**	(1)	**29.**	(3)	**30.**	(3)
31.	(2)	**32.**	(4)	**33.**	(1)	**34.**	(1)	**35.**	(3)	**36.**	(4)	**37.**	(1)	**38.**	(2)	**39.**	(4)	**40.**	(2)
41.	(4)	**42.**	(3)	**43.**	(3)	**44.**	(3)	**45.**	(2)	**46.**	(4)	**47.**	(2)	**48.**	(4)	**49.**	(2)	**50.**	(2)
51.	(3)	**52.**	(4)	**53.**	(1)	**54.**	(1)	**55.**	(2)	**56.**	(3)	**57.**	(2)	**58.**	(1)	**59.**	(3)	**60.**	(3)
61.	(2)	**62.**	(2)	**63.**	(1)	**64.**	(2)	**65.**	(4)	**66.**	(4)	**67.**	(3)	**68.**	(3)	**69.**	(3)	**70.**	(4)
71.	(1)	**72.**	(2)	**73.**	(3)	**74.**	(3)	**75.**	(3)	**76.**	(2)	**77.**	(3)	**78.**	(4)	**79.**	(3)	**80.**	(3)
81.	(4)	**82.**	(3)	**83.**	(2)	**84.**	(4)	**85.**	(4)	**86.**	(3)	**87.**	(4)	**88.**	(1)	**89.**	(2)	**90.**	(3)
91.	(1)	**92.**	(3)	**93.**	(4)	**94.**	(4)	**95.**	(1)	**96.**	(3)	**97.**	(4)	**98.**	(3)	**99.**	(2)	**100.**	(2)

Hints and Solutions

1. Hence, answer figure (2) can be formed from the cut pieces of the problem figure.

2. Hence, answer figure (3) can be formed from the cut pieces of the problem figure.

3. Hence, answer figure (3) can be formed from the cut pieces of the problem figure.

4. Hence, answer figure (3) can be formed from the cut pieces of the problem figure.

5. Hence, answer figure (2) can be formed from the cut pieces of the problem figure.

6. Hence, problem figure is hidden/ embedded in answer figure (2).

7. Hence, problem figure is hidden/embedded in answer figure (2).

8. Hence, problem figure is hidden /embedded in answer figure (3).

9. Hence, problem figure is hidden/ embedded in answer figure (2).

10. Hence, problem figure is hidden/embedded in answer figure (4).

11. Only figure (2) is a square, all others are quadrilateral.

12. Except figure (4), all others are wear on upper part of the body.

13. Except figure (1), all others are obtain to rotates to each other.

14. Except figure (1), all others shaded parts are opposite to each other.

15. Except figure (2), all others geometrical figures are made with lines.

16. Answer figure (1) is similar to the given problem figure.

17. Answer figure (3) is similar to the given problem figure.

18. Answer figure (2) is similar to the given problem figure.

19. Answer figure (4) is similar to the given problem figure.

20. Answer figure (1) is similar to the given problem figure.

21. Answer figure (3) will complete the pattern of the problem figure.

22. Answer figure (4) will complete the pattern of the problem figure.

23. Answer figure (4) will complete the pattern of the problem figure.

24. Answer figure (1) will complete the pattern of the problem figure.

25. Answer figure (1) will complete the pattern of the problem figure.

26. In each problem figure pin design rotates 90° anti-clockwise direction.

27. In each problem figure whole design rotates 90° clockwise direction.

28. In each problem figure one upper and one lower design added.

29. In each problem figure outer side four small designs slipes one place clockwise direction.

30. In each problem figure whole design goes to opposite direction.

31. Problem figure (1) to (2) whole design goes to opposite direction. Similar rule follows from the problem figure (3) to answer figure.

32. Problem figure (1) to (2) arc lines goes to opposite direction and middle small line becomes large. Similar rule follows from the problem figure (3) to answer figure.

33. Problem figure (1) to (2) whole figure becomes mirror image. Similar rule follows from the problem figure (3) to answer figure.

34. Problem figure (1) to (2) two more parts are shaded, one clockwise direction and another anticlockwise direction. Similar rule follows from the problem figure (3) to answer figure.

35. Problem figure (1) to (2) one horizontal line is added. Similar rule follows from the problem figure (3) to answer figure.

36. Answer figure (4) will complete the square.

37. Answer figure (1) will complete the circle.

38. Answer figure (2) will complete the square.

39. Answer figure (4) will complete the circle.

40. Answer figure (2) will complete the triangle.

41. Answer figure (4) is the correct mirror image of the problem figure.

42. Answer figure (3) is the correct mirror image of the problem figure.

43. Answer figure (3) is the correct mirror image of the problem figure.

44. Answer figure (3) is the correct mirror image of the problem figure.

45. Answer figure (2) is the correct mirror image of the problem figure.

46. Answer figure (4) will appear when a piece of paper is folded, punched and open.

47. Answer figure (2) will appear when a piece of paper is folded, punched and open.

48. Answer figure (4) will appear when a piece of paper is folded, punched and open.

49. Answer figure (2) will appear when a piece of paper is folded, punched and open.

50. Answer figure (2) will appear when a piece of paper is folded, punched and open.

51. $3207 \times 12 \times 17 \times 13$

$\uparrow \quad \uparrow \quad \uparrow \quad \uparrow$

$7 \quad 2 \quad 7 \quad 3$

$\therefore$ Unit's digits are 7, 2, 7 and 3.

Hence, required product $= 7 \times 2 \times 7 \times 3 = 294$

$\therefore$ Unit's digit = 4

52. Largest number of 5 digits = 98630

Smallest number of 5 digits = 30689

Hence, required difference

$= 98630 - 30689 = 67941$

53. HCF of 45, 75 and 165

$45\overline{)75}\,(1$ $\quad$ 45 $\quad$ $\overline{30}$

$30\overline{)45}\,(1$ $\quad$ 30 $\quad$ $\overline{15}$

$15\overline{)30}\,(2$ $\quad$ 30 $\quad$ $\overline{\times}$

$15\overline{)165}\,(11$ $\quad$ 15 $\quad$ $\overline{15}$ $\quad$ 15 $\quad$ $\overline{\times}$

$\therefore$ HCF = 15

54. Required smallest number
= LCM of 42, 98 and 70

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

$\therefore$ Required number $= 2 \times 7 \times 3 \times 5 \times 7$
$= 1470$

55. Suppose, first number $= x$
and second number $= x + 10010$
Then, $x + x + 10010 = 234560$
$\Rightarrow \quad 2x = 234560 - 10010$
$\Rightarrow \quad 2x = 224550$
$\because \quad x = 112275$
Hence, greatest number $= x + 10010$
$= 112275 + 10010$
$= 122285$

56. Required decimal equivalent of $17\frac{1}{16}$

$$= \frac{16 \times 17 + 1}{16}$$
$$= \frac{272 + 1}{16}$$
$$= \frac{273}{16}$$
$$= 17.0625$$

57. Suppose number $= x$
Then, $\frac{5.029}{x} = 50.29$
$\Rightarrow \quad x = \frac{5.029}{50.29}$
$\therefore \quad x = 0.1$

58. $\because$ 1 kg = 1000 g
$\therefore$ 4 kg $= 4 \times 1000 = 4000$ g
Hence, required percentage $= \frac{500}{4000} \times 100$
$= 12.5\%$

59. Given, cost price of the bicycle = ₹ 1200
and selling price of the bicycle = ₹ 1500
Hence, required profit percentage

$$= \frac{1500 - 1200}{1200} \times 100$$
$$= \frac{300}{1200} \times 100$$
$$= 25\%$$

60. Given, Principal amount (P)
= ₹ 2500
Time (t) = 4 yr
Amount (A) = ₹ 3300
We know that, simple interest $= \frac{P \times r \times t}{100}$
$\Rightarrow \quad 3300 - 2500 = \frac{2500 \times r \times 4}{100}$
$\Rightarrow \quad 800 = \frac{2500 \times r \times 4}{100}$
$\Rightarrow \quad r = \frac{800 \times 100}{2500 \times 4}$
$\therefore \quad r = 8\%$

61. $40 \xrightarrow{+15} 55 \xrightarrow{+15} 70 \xrightarrow{+15} \boxed{85}$ (in first column)
$45 \xrightarrow{+15} 60 \xrightarrow{+15} 75 \xrightarrow{+15} \boxed{90}$ (in second column)
$50 \xrightarrow{+15} 65 \xrightarrow{+15} 80 \xrightarrow{+15} \boxed{95}$ (in third column)

62. In the given number 97 is the two digits largest prime number.

63.

x	1	y
3	5	z
t	9	2

If we put $x = 8, y = 6, t = 4, z = 7$
Then,

8	1	6	= 15
3	5	7	= 15
4	9	2	= 15
15	15	15	

64. Suppose, capacity of the drum $= x$ L
Water in drum $= \frac{x}{3}$ L
Then, $x - \frac{x}{3} = 60 \Rightarrow \frac{3x - x}{3} = 60$
$\Rightarrow \quad \frac{2x}{3} = 60 \Rightarrow 2x = 180$
$\therefore \quad x = 90$ L

65.
$$\begin{array}{r} 7.7 \\ 7.07 \\ 7.007 \\ \underline{77.0077} \\ \text{Required sum} = \quad = \underline{98.7847} \end{array}$$

66. Given, perimeter of the square park = 72 m

Suppose, side of the square park = x m

Then, $4x = 72$ m

$\Rightarrow$ $x = 18$ m

Hence, area of the square park = $(18)^2 = 324\,m^2$

67. Speed of the train = 54 km/h = $54 \times \frac{5}{18}$ m/s

$= 15$ m/s

Length of the platform = 90 m

Hence, required time = $\frac{90}{15} = 6$ s

68. $\because$ 12 Men = 15 Women

$\therefore$ 1 Man = $\frac{15}{12}$ Women

$\therefore$ 4 Men = $\frac{15}{12} \times 4 = 5$ Women

Women	Days
15 ↑	20 ↓
10	x

$\Rightarrow$ $\frac{x}{20} = \frac{15}{10} \Rightarrow x = \frac{20 \times 15}{10}$

$\therefore$ $x = 30$ days

69. According to the question, Swati purchase 24 ball pens it means she purchase 2 packet pens and 4 pens.

$\because$ Cost price of 1 ball pen = ₹ 12

$\therefore$ Cost price of 4 ball pens = $12 \times 4 =$ ₹ 48

and cost price of 1 packet (10 ball pens)

$= 2 \times 100$

$=$ ₹ 200

Hence, cost price of 24 ball pens

$= 200 + 48$

$=$ ₹ 248

70. Suppose, Bhavana's marks = x

$\therefore$ Isha's marks = $x - 5$

and Karan's marks = $x + 10$

Then, $x + x - 5 + x + 10 = 140$

$\Rightarrow$ $3x + 5 = 140 \Rightarrow 3x = 135$

$\therefore$ $x = 45$

Hence, Karan's marks = $45 + 10 = 55$

71. Number of students obtain less than 20 marks

$= 5 + 10 + 20 = 35$

72. Required decimal equivalent

$= 2200 \times \frac{4}{100} \times \frac{7.5}{100} =$ ₹ 6.6

73. Required, largest five digits even number = 87530

74. Required, largest five digits (any digit repeated twice) number = 99630

75. Number of Boxes sold in Monday

$= 25 \times 7 = 175$ Boxes

Number of Boxes sold in Tuesday

$= 25 \times 5 = 125$ Boxes

Number of Boxes sold in Wednesday

$= 25 \times 3 = 75$ Boxes

Number of Boxes sold in Thursday

$= 25 \times 5 = 125$ Boxes

$\therefore$ Total number of Boxes sold

$= 175 + 125 + 75 + 125 = 500$ Boxes

Remaining Boxes = 75

Hence, total number of Boxes = 500 + 75

= 575 Boxes