

<1M>

1.7: 5 and 5: 7 are equal ratios

- (A) True (B) False (C) Cannot be determined (D) None of above

2. In unitary method, we first find out the value of

- (A) Required quantity (B) two quantities (C) unit quantity (D) none of the above

3. 65: 39 is greater than 350: 725.

- (A) True
(B) False
(C) Can't say
(D) none of above

4. Express the given ratio in the simplest form: 150:600

5. Reduce the ratio in simplest form. 121: 1331 <javascript:>

6. Find out the price of 6 kgs. of tea if 1 kg costs Rs. 35.

7. Ahmed walks at a speed of 5 km per hour while Ali walks at the rate of 10 km per hour . Find the ratio of both.

8. Ram can solve a problem in 2 hours while Shyam can solve the same problem in 3 hours . Find the ratio of both.

9. Are 7: 6:: 7:6 in proportion?

10. Find the ratio of 200ml. to 3 litres.

- (A) 3 : 20 (B) 1 : 15 (C) 3 : 17 (D) none of the above.

11. If two ratios are equal then they are said to be in

- (A) Proportion (B) relation (C) equation (D) symmetry

12. 2: 3 :: 4: 6 are in proportion.

- (A) True (B) False (C) Cannot be determined (D) None

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13. 12:3 and 4: 6 are equal.

- (A) True
(B) False
(C) Cannot be determined

(D) None

14. The simplest form of 2525 : 6500 is

- (A) 260:101 (B) 13:5 (C) 5:13 (D) 101:260

15. On Monday 55 mm of rainfall was recorded while on Tuesday 10 cm of rainfall was recorded. Find the ratio of both.

- (A) 11:20 (B) 10: 11 (C) 55: 1 (D) 1: 55

16. Cost of a dozen rakhi is Rs. 36. What amount will Shikha have to pay if she wants to buy 7 rakhis?

- (A) Rs. 21 (B) Rs. 14 (C) Rs. 12 (D) none of above

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17. Express in ratio form: 4 decametres to 4 kms.

- (A) 10:1 (B) 100:1 (C) 1:100 (D) 1:10

18. Ratio of two equivalent fractions is same.

- (A) True (B) False (C) can't say (D) none of above

19. Express in simplest form: 21: 63

- (A) 3: 9 (B) 1:3 (C) 2:3 (D) 1: 9

20. Calculate the cost of 8 packets of chocolates if 3 packets cost Rs. 45?

- (A) Rs. 170 (B) Rs.150 (C) Rs. 100 (D) Rs. 120

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21. 2: 3 :: 4: 5. In this expression the term 3 is

- (A) Mean (B) Extreme (C) Variable (D) none.

22. In the ratio $x:y$, y is

- (A) antecedent (B) consequent (C) mean (D) extreme

23. Find the ratio of 2ml to 2l.

- (A) 1:10 (B) 1: 1000 (C) 1: 100 (D) none of above

24. The number of boys and girls in a school are 1168 and 1095 respectively. Express the ratio of the number of boys to that of girls in the simplest form.

- (A) 16 : 15 (B) 15 : 16 (C) 73 : 4 (D) 4 : 73

25. Simplify: 3 weeks to 3 days.

- (A) 1 : 7 (B) 7 : 1 (C) 1 : 1 (D) 2 : 2

26. 25 paise : Rs. 60

- (A) 1:240 (B) 280:1 (C) 5:12 (D) 12:5

27. The number of students passing mathematics test is $\frac{2}{3}$ of the number that appeared.

- (A) 3 : 1 (B) 1 : 2 (C) 3 : 2 (D) 2 : 3

28. 10 liters to 0.25 liters.

- (A) 25 : 1 (B) 1 : 25 (C) 1 : 40 (D) 40 : 1

29. Fill in the blank :- $\frac{12}{20} = \frac{\square}{5}$

- (A) 1 (B) 4 (C) 3 (D) 2

30. In a class the number of girls in the merit list of the board examination is two times that of boys.

- (A) 1 : 2 (B) 2 : 1 (C) 3 : 1 (D) 1 : 3

31. Express the ratio 186:403 in simplest form.

- (A) 6 : 13 (B) 5 : 8 (C) 7 : 9 (D) 13 : 6

32. Convert 8 kg to 400 gm in simplest form.

- (A) 1 : 50 (B) 50 : 1 (C) 20 : 1 (D) 1 : 20

33. Express the ratio in simplest form 39: 117

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34. The ratio of the income to the expenditure of a family is 7 : 6. Find the savings if the income is Rs 1400?

- (A) 200 (B) 400 (C) 600 (D) 800

35. Fifteen post cards cost Rs 2.25. What will be the cost of 36 post cards?

- (A) Rs 4.25 (B) Rs 7.30 (C) Rs 5.40 (D) Rs 6.50 <javascript:>

36. The weight of 72 books is 9 kg. What is the weight of 80 such books?

- (A) 12 kg (B) 9 kg (C) 7 kg (D) 10 kg

37. A worker earns Rs 18000 in 15 months. In how many months will he earn Rs 30000?

- (A) 19 months (B) 22 months (C) 16 months (D) 25 months

38. 2 dozen of oranges cost Rs 60. Find the cost of 120 similar oranges.

- (A) Rs 300 (B) Rs 48 (C) Rs 275 (D) Rs 160

39. In a school of 1800 students, 600 are girls. Find the ratio of boys to all the students.
40. If we divide Rs. 20 between Ram and Shyam in the ratio 3: 2, how much will each of them get?
41. If 10 bananas cost Rs. 20, what will 7 bananas cost?
42. Determine whether the given ratios are equal. 30: 45 and 60: 100?
43. 3 dozen pens cost Rs. 72. How much do 2 dozen pens cost?
44. A company manufactures 1000 bulbs per month on an average. It was found out that 50 bulbs were defective in a certain month. Find out the ratio of defective bulbs to the number of bulbs produced.
45. 8 packets of matchboxes contain 640 matchsticks. How many matchboxes will contain 800 matchsticks?
46. Are the two ratios given below equal? 13: 39 and 7: 21.
47. The length, breadth and height of a building is 200 m, 175m and 150 m respectively. Find the ratio of
(i) Length: breadth (ii) length: height.
48. Find the ratio of 20 mins. to 3 hours.
49. Find the ratio of 2mm to 1m .
50. Compare the given ratios and state which is greater?
12: 24 and 32: 64.
51. If we want to divide 60 pens in the ratio 1: 2 between Shikha and Sheena, then the number of pens Shikha will get is
(A) 40 (B) 30 (C) 20 (D) 10
52. $7:30 :: a:150$. Find a.
(A) 30 (B) 40 (C) 35 (D) 50
53. In a company of 150 people, 25 people work in technical department, 55 people work in HR department and the rest work in maintenance department. Find the ratio of people working in HR department to people working in maintenance department.
(A) 11: 15 (B) 15 :11 (C) 11: 7 (D) none of the above.

54. Reena is 20 years old while her sister is 6 years younger than her. Find the ratio of their age when Reena was 15 years old.

- (A) 2 : 3 (B) 3 : 2 (C) 5 : 3 (D) 3 : 4

55. 80 toffees are divided in the ratio of 2 : 3 between Aman and Raman respectively. How many toffees will Aman get?

- (A) 23 (B) 48 (C) 25 (D) 32

56. Complete the following

$$12 : 3 :: 16 : x.$$

- (A) 3 (B) 4 (C) 5 (D) none of above

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57. Sohan earns Rs. 7500 and spends Rs. 5500 per month. Find the ratio of his saving to the expenditure.

- (A) 4 : 15 (B) 15 : 4 (C) 11 : 4 (D) 4 : 11

58. Find the ratio of the price of coffee to the price of tea when coffee costs Rs 24 per 100gm and the tea costs Rs 80 per kg.

- (A) 1 : 3 (B) 3 : 2 (C) 3 : 1 (D) 1 : 4

59. The first, third and fourth terms of a proportion are 12, 8 and 14 respectively. Find the second term.

- (A) 15 (B) $\frac{28}{3}$ (C) $\frac{48}{7}$ (D) 21

60. Margarette works in a factory and earns Rs 955 per month. She saves Rs 185 per month from her earnings. Find the ratio of her income to her expenditure.

- (A) 154 : 37 (B) 191 : 37 (C) 191 : 154 (D) 37 : 191

61. Avinash works as a lecturer and earns Rs. 12000 per month. His wife who is a doctor earns Rs. 15000 per month. Find the ratio of Avinash's income to their total income.

- (A) 4 : 9 (B) 9 : 4 (C) 4 : 5 (D) 5 : 4

62. A car travels 165 km in 3 hours. How far will it travel in $6\frac{1}{2}$ hours?

- (A) 624.5 km (B) 357.5 km (C) 72.5 km (D) 390.5 km <javascript:>

63. In a school library the ratio of mathematics books to science books is same as the ratio of science books to hindi books. If there are 450 books in science and 300 books in hindi, find the number of books in mathematics.

- (A) 720 (B) 675 (C) 300 (D) 450

64. Radha's height is 150 cms. And Radhika is 20 cms. taller than Radha. Find the ratio of the height of both.

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65. The ratio of the length of a school ground to its width is 5:2. Find the length of the ground if width of the ground is 50m.

- (A) 90m (B) 125m (C) 20m (D) 75m

66. Arrange the following ratios in descending order. 7: 63, 12: 54, 12:27.

67. Seema's income is Rs. 2000 and her savings are Rs. 175 per month. Find the ratio of her expenditure to her income.

68. A car can cover a distance of 594 Kms. in 108 litres of petrol. How much petrol will be required by the car to cover a distance of 1758 Kms.?

69. If the first, second and third terms of a proportion are 18, 6 and 25 respectively, then find the fourth term.

70. Determine whether the following numbers are in proportion 18, 30, 30, 50

71. Ram completes his work in 3 days if he works for 5 hours daily. How many days will he take to complete the same work if he works for 3 hours daily?

72. Arrange the following ratios in ascending form. 3: 7, 5: 9 and 1: 3.

73. The length and breadth of a rectangular field are in the ratio of 4: 5. Find the breadth if the length of the field is 20m.

74. Arrange the following ratios in descending order.

16: 24, 10: 20, 7: 21.

- | | |
|---|---|
| (A) $\left \frac{16}{24} > \frac{10}{20} > \frac{7}{21} \right $ | (B) $\left \frac{10}{20} > \frac{16}{24} > \frac{7}{21} \right $ |
| (C) $\left \frac{10}{20} > \frac{7}{21} > \frac{16}{24} \right $ | (D) $\left \frac{16}{24} > \frac{7}{21} > \frac{10}{20} \right $ |

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75. a) If sugar costs Rs. 7 per 100 gm. and salt costs Rs. 5 per 500 gm., then find the ratio of the price of sugar to salt.

76. In an office of 25 people, 11 people like reading, 5 people like singing and 9 people like dancing. Find the ratio of

Ratio and Proportion

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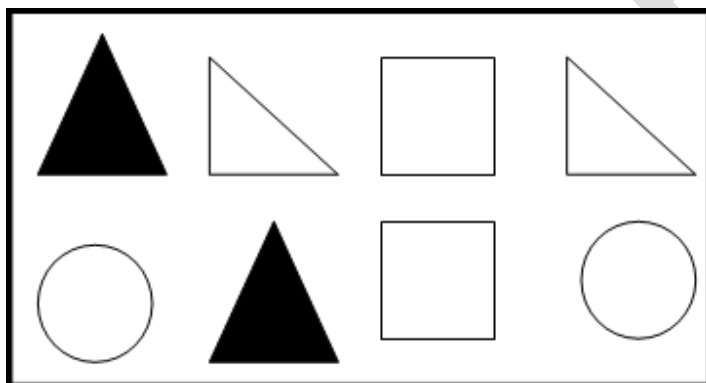
- (a) People who like dancing to people who like singing.
- (b) People who like dancing to people who like reading.
- (c) People who like reading to the total people.

77. The pocket money of A, B, C are Rs. 600, Rs. 500 and Rs. 550 respectively. Find

- (a) ratio of pocket money of A to that of B.
- (b) ratio of pocket money of A to that of C.
- (c) ratio of pocket money of B to that of C.

78. At a local election 126000 people voted. They voted BJP, Congress and TDP in the respective ratio 7:5:2. How many people voted each party?

79. See the figure and find the ratio of



- a) Number of triangles to the number of circles inside the rectangle
- b) Number of squares to the number of triangles inside the rectangle.
- c) Number of squares to all the figures inside the rectangle.
- d) Number of circles to all the figures inside the rectangle.
- e) Number of triangles to all the figures inside the rectangle.