

A. Choose the correct option.

- 1) There are 42 students in a class. Out of these, 28 are boys. The ratio between the number of girls and the total number of students is \_\_\_\_\_.  
a) 2 : 3      b) 1 : 3      c) 3 : 1      d) 3 : 2
- 2) The length of a rope is 1.2 m and the length of a ribbon is 50 cm. The ratio between the length of the rope and the length of the ribbon is \_\_\_\_\_:  
a) 12 : 5      b) 1.2 : 50      c) 12 : 500      d) 5 : 12
- 3) What is the ratio between 20 minutes and 3 hours?  
a) 20 : 3      b) 1 : 9      c) 9 : 1      d) 3 : 20
- 4) Which of the following is in proportion?  
a) 3 : 4 and 4 : 5      b) 1 : 2 and 2 : 3  
c) 5 : 3 and 15 : 9      d) 5 : 3 and 9 : 15
- 5) In which of the following pairs, the first ratio is bigger than the second ratio?  
a) 3 : 5, 4 : 7      b) 2 : 9, 3 : 5  
c) 4 : 11, 11 : 15      d) All of these

B. Fill in the blanks.

- 1) The number of matches won by Team A and Team B is in the ratio  $A : B = 2 : 3$ . The team that won more matches is \_\_\_\_\_.
- 2) Dividing equally into two parts is dividing in the ratio \_\_\_\_\_.
- 3) The ratio of flavours of ice creams sold is vanilla : chocolate = 3 : 7. If 100 ice creams were sold in all, the number of chocolate ice creams is \_\_\_\_\_.
- 4) The ratio 5 : 9 is equivalent to 15 : \_\_\_\_\_.
- 5) The ratio of 1 m to 1 mm is \_\_\_\_\_.
- 6) If four tablets weigh 1000 mg, three tablets will weigh \_\_\_\_\_ mg.

C. Answer the following questions.

1) Find the ratio of:

(i) 210 ml to 3.5 l

(ii) 80 paise to Two rupees eighty paise

2) A bus covers 8 km in 12 minutes. If it travels at the same speed, how much distance would it cover in 3 hours?

3) Divide 84 pens in the ratio 4 : 3.

4) Are the following ratios in proportion? If so, write the means and the extremes.

3000 paise : Rs.90 and 1.4 kg : 4200 g

5) Two friends divide 120 candies between them in such a way that the first friend gets twice the candies that the second friend gets. How much does each get?

6) Ishita is 14 years old. The sum of her age and her father's age is 53 years. Find the ratio of Ishita's age 4 years back to the age of her father 5 years from now.

7) The ratio of the number of books collected by Soumya and Remya is 4 : 7. Find the number of books collected by each of them if the total number of books collected is 55.

8) 6.4 g of an alloy of copper and zinc contains 4 g of copper. What weight of copper would be there in 70.4 g of the alloy?

9) 23 strips of a medicine cost Rs.1311. How many strips can be bought for Rs.3705?

10) The sum of two numbers in the ratio 6 : 7 is 5252. Find the larger of the two numbers.

11) If the sides of a triangle are in the ratio 2 : 6 : 7 and its perimeter is 105 cm, find the length of its largest side.

12) If the angles of a triangle are in the ratio 3 : 1 : 2, find the measure of the smallest angle.

13) The cost of 47 packs having 5 pens each is Rs.1645. What would be the cost of 89 packs of 12 pens each?

14) A brass (alloy of copper and zinc) idol is made of copper and zinc in the ratio 7 : 3. If the weight of the idol is 14.5 g, what are the weights of copper and zinc in it?

15) If 6.3 g of an alloy of copper and zinc contains 3.5 g of copper, how much copper will be there in 1.8 g of alloy?