

Ratio in the Simplest or Lowest Form

1. Write each of the following ratios in the simplest form:

- a. 35: 140 _____ b. 90: 360 _____
c. 425: 350 _____ d. 200: 625 _____

2. Find the ratio of:

- a. 350 to 745 _____
b. 4 metres to 189 metres _____
c. 360 km to 12 km _____
d. 2 l 300 ml to 3 l 220 ml _____
e. 24 hours to 120 hours _____
f. 34 minutes to 96 seconds _____

3. Find the ratio of:

- a. ₹3 to 120 paise _____ b. 8 dozens to 24 _____
c. 3 years to 4 months _____ d. 5 months to 6 weeks _____

4. Complete the following:

- a. The ratio of 60 minutes to 2 hours = 60 min to _____ min
or 60: _____
Lowest form = _____
- b. The ratio of 250g to 1 kg = 250g to _____ g
or 250: _____
Lowest form = _____
- c. The ratio of ₹50 to 200 paise = _____ to 200 paise
or _____ : 200
Lowest form = _____
- d. The ratio of 14 km to 5600m = _____ m to 5600 m
or _____ : 5600
Lowest form = _____

- e. The ratio of 4m to 45 cm = _____ m to 45 cm
or _____ : 45
Lowest term = _____

5. Express each of the following in its simplest form.

- a. 44:132 _____ b. 27:54 _____ c. 85:255 _____

6. Find the ratio of

- a. 30 minutes to 1.5 hours _____
b. 500 ml to 2 liters. _____

7. Express each of the following as instructed.

- a. In a class there are 36 boys and 40 girls. Find the ratio of boys to girls.
b. In a box containing 70 bulbs, 25 were found to be defective. Find the ratio of defective bulbs to good bulbs.
c. Length of the line segment AB is 9 cm and length of the line segment CD is 7 cm. Find the ratio of line segment AB to line segment CD.

8. Express the following a ratios.

- a. The length of a rectangle is twice of its breadth.
b. The number of students passing mathematics test is $\frac{3}{4}$ of the number that appeared.

9. Solve the following.

Out of 1800 students in a school, 750 opted basketball, 800 opted cricket and remaining opted table tennis. If a student can opt only one game, find the ratio of:

- a. Number of students can opt basketball to the number of students who opted table tennis.
b. Number of students who opted cricket to the number of students who opted basketball.
c. Number of students who opted basketball to the number of total students.

- 10. The length of a room is 13m and its breadth is 7.8 m. Find the ratio of its length to its breadth.**
- 11. Rakesh works as a lecturer and earns ₹25,000 per month. His wife who is an editor earns ₹30,000 per month. Find the ratio of:**
- Rakesh's income to the income of his wife.
 - Rakesh's income to their total income.
- 12. Kabir works in a company and earns ₹5950 per month. He saves ₹870 per month from his earnings. Find the ratio of:**
- Her savings to her income
 - Her income to her expenditure
 - Her savings to her expenditure
- 13. The ratio of length of a field to its width is 7: 4. Find its width if its perimeter is 88 metres.**
- 14. Divide ₹872 between Kajal and Priyanka in the ratio of 5: 3.**
- 15. The ratio of income to the expenditure of a family is 11: 7. Find the income if the saving of the family is ₹480.**
- 16. A factory produces bulbs. If 3 out of every 12 bulbs are defective and daily production of the factory is 7500 bulbs. Find out the number of defective as well as non-defective bulbs.**
- 17. In a class test 45 out of 135 students passed. Find the ratio between the:**
- failed students to the number of passed students.
 - passed students to the total number of students.
- 18. Two numbers are in the ratio 2:5. If the sum of the numbers is 63. Find the answers.**
- 19. The scale of a map is 1 : 20,00,000. What is the actual distance between the two town if they are 2 cm apart on the map?**