

7th – Ratio & Proportion



Type 1: Finding a ratio

- Find the ratio of
 - 60 cm and 1m
 - 1 rupee and 75 paise
 - 1 day and 8 hour
 - 1 kilogram and 500 grams

Type 2: Expressing a ratio in its simplest form

- Express each of the following ratios in its simplest form
 - 20:30
 - 12 :10
 - 5:30:45
 - 15 :3
 - 24 :8

Type 3: Comparison of ratios

- Which ratio is greater?
 - 8 :35 or 9:42
 - 7:11 or 5 :3

Type 4: Increase or decrease in a ratio

- Increase the number 240 in the ratio 4 :7
- Decrease the number 350 in the ratio 7 :5

Type 5: Combining ratios

- If $a:b = 0.5:1.8$ and $b:c = 0.5:1.3$, find $a:b:c$
- If $a:b = 5 :2$ and $b:c = 3 :4$, find $a:b:c$

Type 6: Dividing a quantity in a given ratio

- Two numbers are in the ratio 4:9 and their sum is 78, find the numbers.
- Anil divides a certain amount of berries among his two children Amit and Ria in the ratio 4:5. If Amit got 2800 berries, find Ria's Share.
- Two numbers are in the ratio 2:3 and their difference is 12. Find the numbers.

Type 7: Converting a ratio fractional ratio into a Whole number ratio

- Convert the ratio 0.5:0.33 into a whole number ratio.
- Find the third Proportional to 4 and 10.

Type 8: Word Problems based on Proportional

- The Length and breadth of a rectangular hall are in the ratio 7:5. If the length of the hall is 10.5 metres, find its breadth.
- The ratio of the ages of two children in a family is 8:5. If the elder child is 16 years old, what is the age of the Younger Child?
- A train covers 120km in 3 hours
 - How much distance is covered in 8 hours?
 - How much time does the train take to cover a distance of 900 km
- An airplane flies 1800km in 6 hours. Find its speed.
- Find the ratio of Rs 30 to 900 Paise

