

Ratio and Proportion (Including Sharing in a Ratio)

Chapter 6: Ratio and Proportion (Including Sharing in a Ratio) · Topic 1

Key Concept

To share an amount in a ratio, like sharing ₹300 in the ratio 2:3, we first add the parts ($2+3=5$), then divide the total by this sum.

Each part's share is found by multiplying the total by (its ratio part ÷ total parts), so $\frac{2}{5}$ of ₹300 = ₹120 and $\frac{3}{5}$ of ₹300 = ₹180.

Proportions help us verify if two ratios are equivalent, useful for scaling recipes, maps, or model sizes.

Understanding ratio sharing is useful in real life, like dividing profits, mixing ingredients, or splitting costs fairly.

Quick Revision Notes

- Sharing in a ratio divides a total by given parts.
- ₹300 in ratio 2:3: total parts = 5.
- $\frac{2}{5}$ of 300 = ₹120; $\frac{3}{5}$ of 300 = ₹180.
- Each share uses (part ÷ total parts) × total.
- Proportions verify equivalent ratios.
- This helps scale recipes or maps.
- Ratio sharing helps split profits or costs.
- It's useful for many real-life divisions.

Practice Questions

- 1 Share ₹400 in the ratio 1:3.
- 2 Share ₹900 in the ratio 2:1.
- 3 Solve a word problem sharing profits in a ratio.
- 4 Discuss why ratio sharing is useful in daily life.
- 5 Verify if 2:3 and 4:6 are proportional.
- 6 Create your own ratio sharing problem.