

Sharing a quantity in a given ratio

MODULE 4 · RATIO AND PROPORTION NUMBER

To share in a ratio, **add the parts** to find how many shares there are, divide to find one share, then multiply.



€20 in 2 : 3

→ Share €20 as 2 : 3 → 5 parts → €4 each → **€8 and €12.**

SHARE €30 BETWEEN TWO PEOPLE IN THE RATIO 2 : 3

- 1 Add the parts: $2 + 3 = 5$ shares.
- 2 One share = $€30 \div 5 = €6$.
- 3 $2 \times €6 = €12$ and $3 \times €6 = €18$ → **€12 and €18** (check: $€12 + €18 = €30$).

HOW TO ANSWER TODAY

- **Share in a ratio.** Add the ratio parts. Divide the total by that number to find ONE part. Multiply each ratio number by it.

Share €90 in 2:3 → 5 parts, $€90 \div 5 = €18$ per part → €36 and €54

WARM-UP

- 1 The school tuck shop sells **20** stickers on Friday morning. The stickers sold are split between GAA crests and smiley faces in the ratio **1:3**. How many of each type are sold?
| Share 20 in the ratio 1:3.
- 2 5th class brings **24** free cinema vouchers to share between the junior and senior groups in the ratio **1:2**. How many vouchers does each group get?
| Share 24 in the ratio 1:2.

PRACTICE

- 1 Saoirse is hosting a sleepover and lays out **72** biscuits on two trays for the snack table. She splits the biscuits between the chocolate tray and the plain tray in the ratio **1:5**. How many biscuits are on each tray?
| Share 72 in the ratio 1:5.
- 2 Aoife's granny has a brown bread recipe that serves **3** people and uses **240 g** of flour. Aoife wants to bake enough for **9** people at the family gathering. How much flour does she need?
| A recipe for 3 people uses 240 g of flour. How much flour is needed for 9 people?

CHALLENGE

- 1 5th class raise **€90** at the bake sale tray during break. They agree to share the money between the GAA club, the school garden and the book fund in the ratio **2:3:5**. How much does each group get?
- 2 5th class have **€120** to spend on decorations for World Book Day. They split the money between bunting, posters and book covers in the ratio **2:3:5**. How much do they spend on each?
| Share €120 in the ratio 2:3:5.