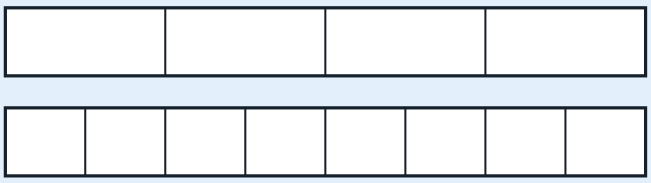
Recipes, mixtures and scaling quantities

MODULE 4 · RATIO AND PROPORTION NUMBER

Scaling a recipe or mixture keeps the ratio the same — multiply every ingredient by the same number.



for 4

for 8 (x2)

→ A recipe for 4 doubled to serve 8 needs **twice** every ingredient.
→ For 6 from a recipe-for-4, multiply each amount by 6/4 = 1.5.

A RECIPE FOR 4 USES 200 G FLOUR. HOW MUCH FOR 6?

1. Find the amount for **one**: 200 g ÷ 4 = **50 g**.
2. Scale to 6: 6 × 50 g = **300 g**.

WARM-UP

1. Saoirse is baking brown bread with her granny. The recipe makes enough for **2** people and uses **150 g** of flour. How much flour does she need to make enough for **6** people?

   A recipe for 2 people uses 150 g of flour. How much flour is needed for 6 people?

2. Saoirse is making pancakes for Seachtain na Gaeilge using a recipe that serves **2** people and uses **150 g** of flour. She wants to scale the recipe up to serve **4** people. How much flour does she need?

   A recipe for 2 people uses 150 g of flour. How much flour is needed for 4 people?

PRACTICE

1. Tadhg is baking brown bread with 5th class for the orchard picnic. The recipe serves **3** people and uses **120 g** of flour. How much flour does Tadhg need to serve **9** people?

   A recipe for 3 people uses 120 g of flour. How much flour is needed for 9 people?

2. Mr Ó Briain runs a daily question for 5th class each morning. The ratio of pupils who get it right to pupils who get it wrong is **1:2**. On Friday, **5** pupils got it right. If the ratio stays the same, how many got it wrong?

   Fill in the missing number to make equivalent ratios: 1:2 = 5:?

CHALLENGE

1. Aoife is helping her mam bake brown bread for a family gathering. The recipe serves **4** people and uses **225 g** of flour. How much flour is needed to make enough for **16** people?

2. On the school nature walk through the local park, 5th class divide a long flower bed into **15** equal sections to plant wildflower seeds. Cian wants to plant seeds in **4/5** of the flower bed. How many of the **15** sections must he plant?

   To shade 4/5 of a shape divided into 15 equal parts, how many parts must be shaded?