Scaling recipes and mixtures

6 questions | 15 marks

Equivalent correct methods earn the corresponding marks.

1. A recipe for 2 people uses 100 g flour. Find the amount for 6 people. [2 marks]

Six is three times two, so multiply 100 g by 3.

Answer: 300 g.

2. Soup for 8 people needs 1.2 L stock. Find the stock for 4 people. [2 marks]

Four is half of eight; halve 1.2 L.

Answer: 0.6 L.

3. Blue:white paint is $2:3$. How much white goes with 400 mL blue? [2 marks]

Two parts are 400 mL, so one is 200 mL.

Three parts are 600 mL.

Answer: 600 mL.

4. A recipe for 5 people uses 250 g rice and 150 g peas. Find both amounts for 8 people. [3 marks]

Multiply both amounts by $\frac{8}{5}$.

$250(\frac{8}{5}) = 400;\ 150(\frac{8}{5}) = 240$.

Answer: 400 g rice and 240 g peas.

5. Concentrate:water is $1:5$. How much concentrate is in 1.8 L of drink? [3 marks]

Six parts make 1.8 L.

Concentrate is one part: $\frac{1.8}{6} = 0.3$ L.

Answer: 0.3 L, or 300 mL.

6. A cook doubles every ingredient in a cake. Must the baking time double? Explain. [3 marks]

Ingredient amounts can scale with servings.

Baking time also depends on the tin, depth and oven. The same assumption need not hold.

Answer: No.