

Ratio and Proportion

Ratio problems/Recipes

5a. Shape A has been enlarged by different scale factors to make shapes B, C and D.

Shape	Length	Width
A	3cm	4cm
B		12cm
C	15cm	
D	30cm	

Calculate the missing measurements.

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5b. Shape A has been reduced by different scale factors to make shapes B, C and D.

Shape	Length	Width
A	12cm	24cm
B		6cm
C	6cm	
D	2cm	

Calculate the missing measurements.

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7a. The ratio of strawberries to grapes is 3:2.

Pippa has 25 pieces of fruit in total.

Calculate the number of strawberries and grapes.

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7b. The ratio of peas to carrots is 5:4.

Leah has 108 vegetables in total.

Calculate the number of peas and carrots.

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8a. Jake is buying some paint.

The ratio of white to blue to green paint is 20:50:100.

If he buys 200 litres of blue paint, how much white and green paint will he need?



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8b. Jaiden is buying some paint

The ratio of white to blue to green paint is 5:7:8.

If he buys 64 litres of green paint, how much white and blue paint will he need?



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5. Here is part of a recipe for 6 Yorkshire puddings.

192g of plain flour
3 eggs
282ml of milk

A. Calculate the quantities needed for 1 person.

B. Calculate the quantities needed for 8 people.

	Flour	Eggs	Milk
1 person	g		ml
8 people	g		ml

2. The recipe below makes five sausage rolls. How much of each ingredient would I need if I made four times as many sausage rolls?

500 g sausage meat	_____ g sausage meat
1.5 teaspoons mixed herbs	_____ teaspoons mixed herbs
1 tablespoon tomato puree	_____ tablespoons tomato puree
25 g cheddar cheese	_____ g cheddar cheese
750 g puff pastry	_____ g puff pastry
1 egg	_____ eggs

1. The recipe below serves 8 people, but Hannah wants to make it for 24 people. She has upscaled it and written out the new recipe.

Serves 8 people	Serves 24 people
1 kg minced beef	3 kg minced beef
2 red peppers	6 red peppers
800 g chopped tomatoes	1,600 g chopped tomatoes
2 large onions	4 large onions
610 g kidney beans	1.83 kg kidney beans
100 g chilli con carne mix	100 g chilli con carne mix
400 ml boiling water	0.12 L boiling water

Find and explain her mistakes.

Mistake 1	
Mistake 2	
Mistake 3	
Mistake 4	

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