

Recipe Questions

Q1.

Here is a list of the ingredients needed to make leek and potato soup for 6 people.

Leek and Potato Soup
Ingredients for 6 people
900 ml chicken stock
900 ml water
750 g leeks
350 g potatoes
350 g onions

(a) Find the ratio of the weight of leeks to the weight of potatoes.

Give your ratio in its simplest form.

.....
(2)

(b) Ainsley wants to make leek and potato soup for 13 people.

Work out the amount of chicken stock he needs.

..... ml
(2)

(c) Delia makes leek and potato soup for a group of people.

She uses 1250 g of leeks.

Work out the number of people in the group.

.....
(2)

(Total for Question is 6 marks)

Q2.

15 Here is a list of ingredients for making Apple and Raspberry Crumble for 6 people.

Apple and Raspberry Crumble	
Ingredients for 6 people	
120 grams	plain flour
230 grams	apples
200 grams	raspberries
160 grams	soft brown sugar
90 grams	butter

(a) Sam wants to make Apple and Raspberry Crumble for 15 people. She has enough plain flour, soft brown sugar and butter.

Work out the amount of apples and the amount of raspberries Sam needs.

apples grams
raspberries grams
(3)

(b) Find the fraction of the total weight of ingredients for 6 people that is soft brown sugar.

Give your answer in its simplest form.

.....
(3)

(Total for question = 6 marks)

Q3.

Here is a list of ingredients needed to make apple and blackberry crumble for 4 people.

Apple and Blackberry Crumble	
Ingredients for 4 people	
120 grams	flour
80 grams	sugar
90 grams	butter
300 grams	apples
115 grams	blackberries

Rufus wants to make apple and blackberry crumble for 10 people.

(a) Work out the amount of apples he needs.

..... grams

(2)

Roland makes apple and blackberry crumble for a group of people.
He uses 920 grams of blackberries.

(b) Work out the number of people in the group.

.....

(2)

(Total for question = 4 marks)

Q4.

Here is a list of ingredients to make 12 chocolate cupcakes.

<p>Chocolate cupcakes Ingredients for 12 cupcakes</p> <p>110 g butter 100 g sugar 75 g flour 25 g cocoa 2 eggs</p>
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James wants to make exactly 30 cupcakes.

(a) How much butter does James need?

..... g

(2)

Sophie made some chocolate cupcakes for a party.
She used 375 g of sugar.

(b) How many cupcakes did Sophie make?

.....

(2)

(Total for question = 4 marks)

Q5.

Here is a list of ingredients needed to make 16 cookies.

Ingredients for 16 cookies
120 g butter
150 g sugar
240 g flour
170 g chocolate
1 egg

Max wants to make 40 cookies.

(a) How much flour does Max need?

..... g
(2)

Abby made cookies to sell at a school fair.
She used 600 g of butter.

(b) How many cookies did she make?

.....
(2)

(c) Find the ratio of the weight of sugar to the weight of flour in the list of ingredients.
Give your answer in the form 1: n

1 :
(2)

(Total for question = 6 marks)

Q6.

Here are the ingredients needed to make 12 muffins.

Ingredients to make 12 muffins
300 g flour
150 g sugar
250 ml milk
100 g butter
2 eggs

Sarah makes 60 muffins.

(a) Work out how much sugar she uses.

..... g
(2)

James makes some muffins.
He uses 625 ml of milk.

(b) How many muffins did he make?

.....
(2)

(Total for question = 4 marks)

Q7.

Here is a list of ingredients for making 24 Rocky Road Crunchy Bars.

Rocky Road Crunchy Bars	
Ingredients for 24 bars	
125 grams	butter
300 grams	chocolate
3 tablespoons	syrup
200 grams	biscuits
100 grams	marshmallows
2 teaspoons	icing sugar

Silvester wants to make 30 Rocky Road Crunchy Bars.

(a) Work out the amount of marshmallows he needs.

..... grams

(2)

Nigella makes some Rocky Road Crunchy Bars.
She uses 850 grams of chocolate.

(b) Work out the number of Rocky Road Crunchy Bars she makes.

.....

(2)

(Total for question = 4 marks)

Q8.

Here is a list of the ingredients needed to make lentil soup for 6 people.

Lentil Soup (for 6 people)
120 g lentils
300 g carrots
800 ml vegetable stock
3 onions

Jenny wants to make lentil soup for 24 people.

(a) Work out the amount of vegetable stock she needs.

..... ml
(2)

Ravi is going to make lentil soup.
He uses 450 g of carrots.

(b) How many people is Ravi making the lentil soup for?

.....
(2)

(Total for question = 4 marks)

Q9.

Here is a list of ingredients needed to make **one** lemon cake.

<p style="text-align: center;">Lemon cake</p> <p style="text-align: center;">Ingredients</p> <p>125 g butter</p> <p>175 g sugar</p> <p>175 g flour</p> <p>60 ml milk</p> <p>2 eggs</p> <p>$1\frac{1}{2}$ lemons</p> <p>100 g icing sugar</p>

(a) Write down the ratio of the weight of butter to the weight of flour.
Give your ratio in its simplest form.

.....
(2)

Alison wants to make some of these lemon cakes to sell at a school fair.
She only has 750 g of butter and 8 lemons.
She has plenty of all the other ingredients.

(b) Work out the greatest number of these lemon cakes Alison can make.

.....
(2)

(Total for question = 4 marks)

Mark Scheme

Q1.

Question	Working	Answer	Mark	Notes
(a)	$750 \div 350$ oe		2	M1 Also award for 7 : 15, 15 to 7 A1
		15 : 7		
(b)	$900 \times \frac{13}{6}$		2	M1 for $\frac{900}{6}$ or 150 or $\frac{13}{6}$ (= 2.16...) oe or 900×13 or 11 700 A1 cao
		1950		
(c)	$6 \times \frac{1250}{750}$ or $1250 \div \frac{750}{6}$		2	M1 for $\frac{1250}{750}$ oe (= 1.66...) or $\frac{750}{1250}$ oe (= 0.6) or $\frac{750}{6}$ oe (=125) A1 cao
		10		
				Total 6 marks

Q2.

Q	Working	Answer	Mark	Notes
(a)	$15 \div 6 (=2.5)$ or $6 \div 15 (=0.4)$ or $230 \div 6 (=38.33)$ or $200 \div 6 (=33.33)$ or $6 \div 230 (=0.026)$ or $6 \div 200 (=0.03)$ $230 \times "15/6"$ or $200 \times "15/6"$ oe	apples = 575 & raspberries = 500	3	M1 M1 dep (i.e "correct" calculation for apples OR raspberries) A1 both correct SC M1M1A0 if answers wrong way round with/without working
(b)	$120 + 230 + 200 + 160 + 90 (=800)$ $160 / "800"$	1/5	3	M1 M1 dep A1 cao SC B2 for 0.2, 20%, 2/10 no working
Total 6 marks				

Q3.

Q	Working	Answer	Mark	Notes
(a)	E.g. $\frac{300}{4} \times 10$			M1 for a correct scale factor or a correct first step E.g. $\frac{300}{4}$ or 75 or $\frac{10}{4}$ or 2.5 or $300 \div 4 (=75)$
		750	2	A1
(b)	E.g. $\frac{920}{115} \times 4$			M1 for a correct scale factor or a correct first step E.g. $\frac{920}{115}$ or 8 or $\frac{115}{4}$ or 28.75
		32	2	A1
Total 4 marks				

Q4.

Q	Working	Answer	Mark	Notes
(a)	Eg $\frac{30}{12} \times 110$ or 2.5×110 or $\frac{30}{12}$ or 2.5 or $\frac{110}{12} \times 30$ or $9.16(666...) \times 30$ or $\frac{110}{12}$ or $9.16(666...)$ oe	275	2	M1 Accept 9.16(666...) rounded or truncated to at least 3 SF
				A1
(b)	Eg $\frac{375}{100} \times 12$ or 3.75×12 or $375 \div \frac{100}{12}$ or $375 \div 8.33(333...)$ or $\frac{12}{100} \times 375$ or 0.12×375	45	2	M1 For a complete method Accept 8.33(333...) rounded to at least 3 SF
				A1
Total 4 marks				

Q5.

Question	Working	Answer	Mark	Notes
(a)	$(40 \div 16) \times 240$ oe			M1 for a fully correct method
		600	2	A1
(b)	$(600 \div 120) \times 16$ oe			M1 for a fully correct method
		80	2	A1
(c)	$240 \div 150$ or $150 \div 240$ oe			M1
		1.6 oe	2	A1
Total 6 marks				

Q6.

Q	Working	Answer	Mark	Notes
a	60 ÷ 12 × 150 or 60 ÷ 12 (=5) or 150 ÷ 12 (=12.5)			M1 allow x ÷ 12 × 60 oe where x is 300 or 250 or 100 or 2
		750	2	A1
b	625 ÷ 250 × 12 oe			M1 complete method
		30	2	A1
Total 4 marks				

Q7.

Question	Working	Answer	Mark	Notes
(a)	e.g. $\frac{100}{24} \times 30$		2	M1 For $\frac{100}{24}$ (=4.16(66.)) or $\frac{30}{24}$ or 1.25 or $\frac{24}{100} = \frac{30}{x}$ oe
		125		A1
(b)	e.g. $\frac{850}{300} \times 24$ or $850 \div \frac{300}{24}$ oe		2	M1 Complete method to find number made
		68		A1 cao
Total 4 marks				

Q8.

Question	Working	Answer	Mark	Notes
a	eg. 24 ÷ 6 × 800			M1 for a complete method
		3200	2	A1 accept 3.2 litres
b	eg. 450 ÷ 300 × 6			M1 for a complete method
		9	2	A1
Total 4 marks				

Q9.

Question	Working	Answer	Mark	Notes
(a)	125 : 175	5 : 7	2	M1 for any equivalent ratio or 7 : 5 A1 Accept 1 : 1.4
(b)	750 ÷ 125 oe (=6) or 8 ÷ 1.5 oe (=5.3333)	5	2	M1
				A1