

Q1. What is the ratio of red marbles to the other colours? A. 6 : 10
3 : 5

Q2. What is the proportion of red marbles? A. 6 'out of' 16 ($6/16$)
3 'out of' 8 ($3/8$)

Q3. What is the ratio of red to blue to green marbles? A. 6 : 2 : 8
3 : 1 : 4

Q4. If there are 24 marbles in the same ratios, how can you work out how many of each colour there are?

How do we solve this using 3 : 1 : 4?

Red = $3/8$ of 24 = 9 red marbles

Blue = $1/8$ of 24 = 3 blue marbles

Green = $4/8$ of 24 = 12 red marbles

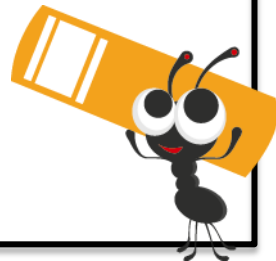
How would we check our answers?

Turn the ratios into fractions (proportions).
The denominator is each of the ratio parts added together ($3 + 1 + 4 = 8$)
The numerator is the ratio part e.g. red = $3/8$.



Let's Practice:

- £60 divided in the ratio 2 : 3
- £100 divided in the ratio 1 : 4
- £30 divided in the ratio 11 : 4
- 60 kg divided in the ratio 6 : 5 : 1
- 75 kg divided in the ratio 12 : 8 : 5
- 108 kg divided in the ratio 3 : 4 : 5



Let's Practice answers:

- £60 divided in the ratio 2 : 3 **£24, £36**
- £100 divided in the ratio 1 : 4 **£20, £80**
- £30 divided in the ratio 11 : 4 **£22, 8**
- 60 kg divided in the ratio 6 : 5 : 1 **30kg, 25 kg, 5 kg**
- 75 kg divided in the ratio 12 : 8 : 5 **36kg, 24kg, 15kg**
- 108 kg divided in the ratio 3 : 4 : 5 **27kg, 36kg, 45kg**



Chocolate Buns

To make 12 Chocolate Buns you need;-

100g margarine
120g caster sugar
2 eggs
150g self raising sugar

Find half the amount
and add it to the
original

Half the amount

To make 18 Chocolate Buns you need;-

150 g margarine
180 g caster sugar
3 eggs
225 g self raising sugar

To make 6 Chocolate Buns you need;-

50 g margarine
60 g caster sugar
1 eggs
75 g self raising sugar

I used 5 eggs

2 ½ times
The original
amount

250 g margarine
300 g caster sugar
375 g self raising sugar
How many buns did I make?



Potato Scones

To make 8 Potato Scones you will need;-
450g cooked potatoes
2.5ml spoon salt
50g butter
100g self raising flour

Add $\frac{1}{2}$ again to
the original
amount

Multiply by 4

To make 12 Potato Scones you will need;-

675 g cooked potatoes
3.75 ml spoon salt
75 g butter
150 g self raising flour

To make 32 Potato Scones you will need;-

1800 g cooked potatoes
10 ml spoon salt
200 g butter
400 g self raising flour

2 $\frac{1}{2}$ times the
original amount

I used 250 g self raising flour
1125 g cooked potatoes
6.25 ml spoon salt
125 g butter

How many Potato Scones did I make?



Breakfast Cereal

100g of Multigrain Hoops contains
6.5g protein
3.8g fat
4.6g fibre
78g carbohydrates

Multiply by 3

Divide by 2

300g of Multigrain Hoops contains

19.5 g protein
11.4 g fat
13.8 g fibre
234 g carbohydrates

50g of Multigrain Hoops contains

3.25 g protein
1.9 g fat
2.3 g fibre
39 g carbohydrates

I ate 195g carbohydrates

How much did I have of the following?

16.25 g protein
9.5 g fat
11.5 g fibre

How many grams of Multigrain Hoops

Divide the 100g amount
by 20 to find 5%

Double the 100g amount
then take away the 5%

