

## Ratios and Fractions

**Objective: To understand ratios and how to convert them into fractions.**

### **Recap of Previous Material:**

1. Write 321% as a decimal.
2. Write  $-0.042$  as a percentage.
3. Write 0.24 as a fraction in lowest terms.
4. Write  $\frac{11}{25}$  as a decimal.
5. Hence write  $\frac{11}{25}$  as a percentage.

### Warm-up:

1. Alice and Bob, two contestants on a game show, win a total of £6000. Alice gets twice as much as Bob. What is the **ratio** the money is split in? What **fraction** of the total amount does Alice get? What **fraction** of the total amount does Bob get? What actual amount of money do they each get?
2. A cake is made from 500g of sugar, 500g of flour, and 1kg of butter (disclaimer: don't try to make a cake with these amounts! It wouldn't work well...) How much does the cake weigh? What fraction of its weight is flour? What fraction of its weight is butter? If we wanted to make 3 cakes like this, how much of each ingredient would we need?

### **Theory - Ratios and Fractions:**

Write both parts of the ratio  $4 : 3$  as fractions.

Write all three parts of the ratio  $6 : 66 : 24$  as fractions.

Write  $\frac{1}{17}$  as a ratio.

Three people share a pizza. Claire gets  $\frac{1}{8}$ , David gets  $\frac{1}{2}$ , and Evie gets the rest. How much does Evie get? What is the ratio in which the pizza is shared out?

**Practice:**

1. Write both parts of  $11 : 13$  as a fraction.
2. Write all three parts of  $100 : 1 : 50$  as a fraction.
3. Write  $\frac{11}{123}$  as a ratio.
4. Some money is split three ways. Two people get  $\frac{5}{9}$  and  $\frac{1}{7}$  of the total amount, respectively. In what ratio is the money split? What fraction does the third person get?