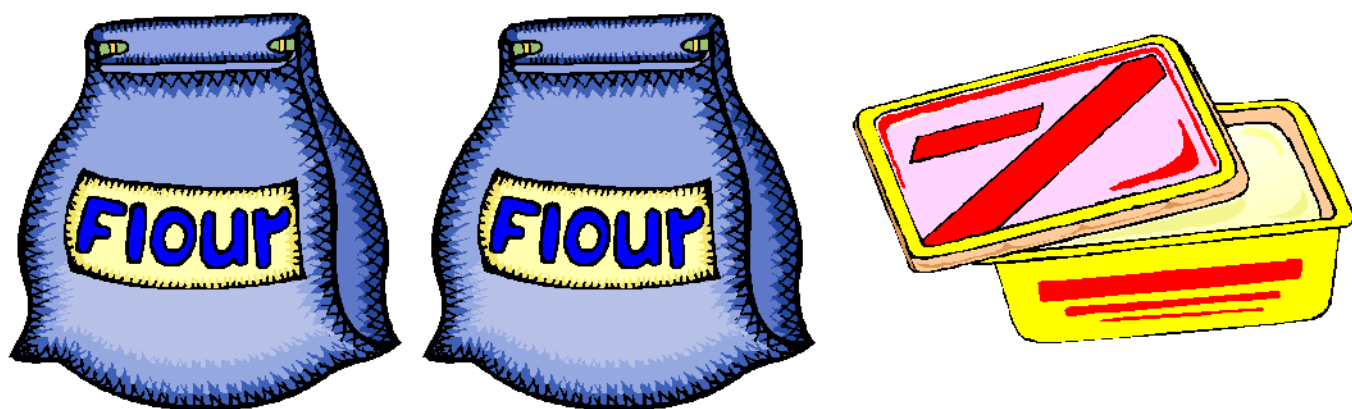


Ratio

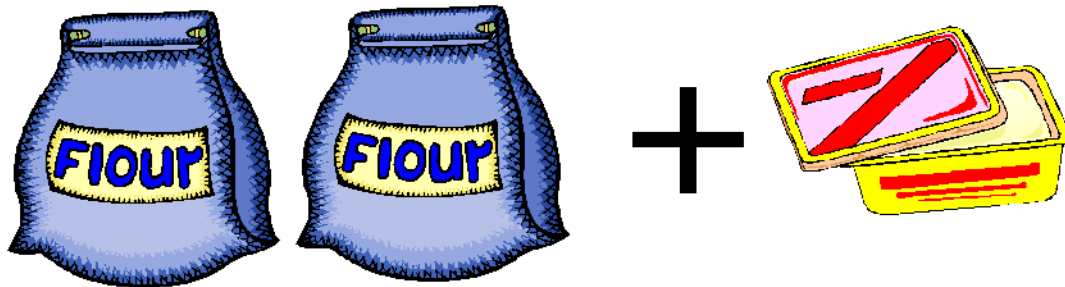
Ratio is a way of comparing two or more quantities.



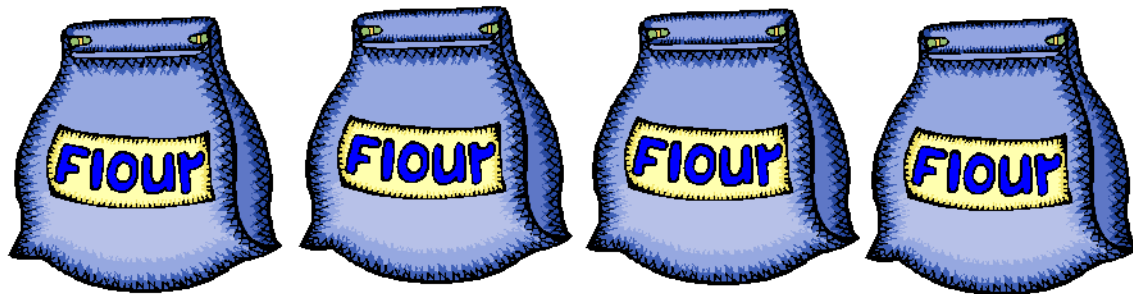
Pastry contains flour and butter in a ratio of **2:1**

Pastry Ratios

Pastry contains flour and butter in a ratio of **2:1**



To make one batch of pastry we use **200g** flour and **100g** butter.

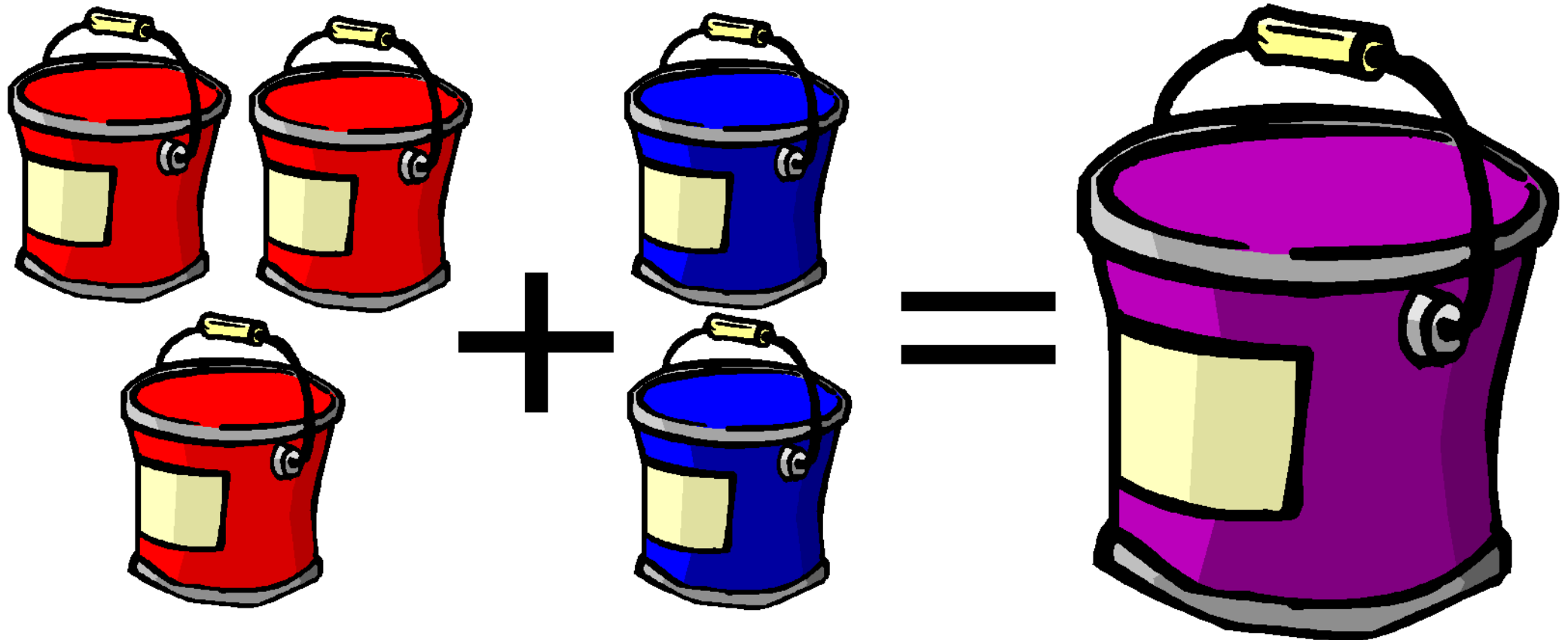


+ how much **butter**?

If we use **400g** flour how much **butter** would we need to use?

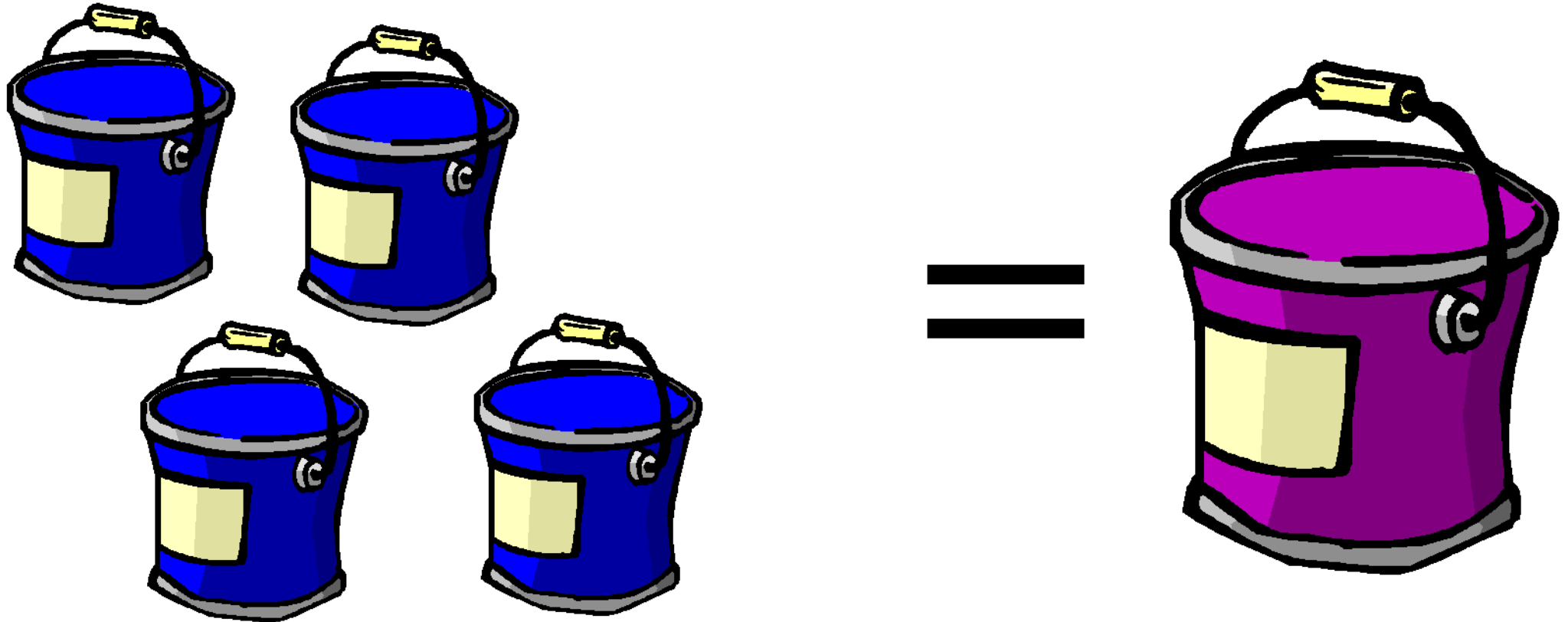
Paint Ratios

Purple paint contains **red** and **blue** paint in the ratio of **3:2**



Paint Ratios

I have four cans of **blue** paint, how many cans of **red** paint do I need to make purple paint?
Remember the ratio **3:2**



Writing Ratios

Ratios can be expressed in several ways: fraction, decimal, percent, or written with : or to.



In a group of four children there are **3 girls** and **1 boy**. The ratio of girls to boys can be written as:

3:1 (3 girls to every boy)

3/4 are girls, **1/4** are boys

Writing Ratios

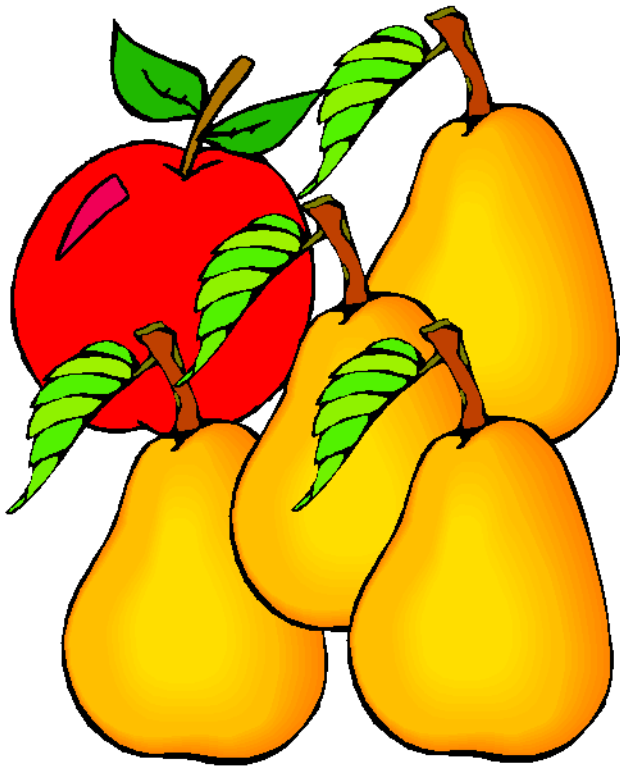
Ratios can be expressed in several ways: fraction, decimal, percent, or written with : or to.



In a group of four children there are **3 girls** and **1 boy**. The ratio of **girls** to **boys** can be written as:
0.75 are girls (divide 3 by 4) and **0.25** are boys
75% are girls and **25%** are boys

Writing Ratios

If you write a **COMPARISON**, you only use the **NUMBER OF EACH ITEM**, not the **TOTAL NUMBER**.

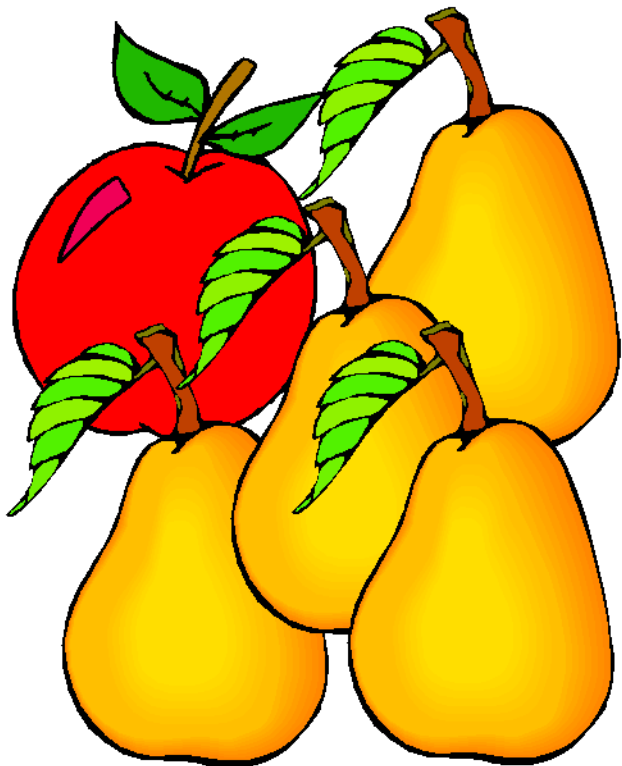


The ratio of **apples** to **pears** is **1:4**

For every **apple** there are **4 pears**.
How many **pears** would you have if
you had **3 apples**?

Writing Ratios

If you write a **FRACTION**, the **NUMERATOR** is the **QUANTITY YOU ARE INTERESTED IN**, and the **DENOMINATOR** is the **TOTAL NUMBER OF ITEMS**. This fraction can then be changed to a decimal or a percent.



$\frac{1}{5}$ of the fruit are **apples**

$\frac{4}{5}$ are **pears**

0.2 are **apples** (1 divided by 5)

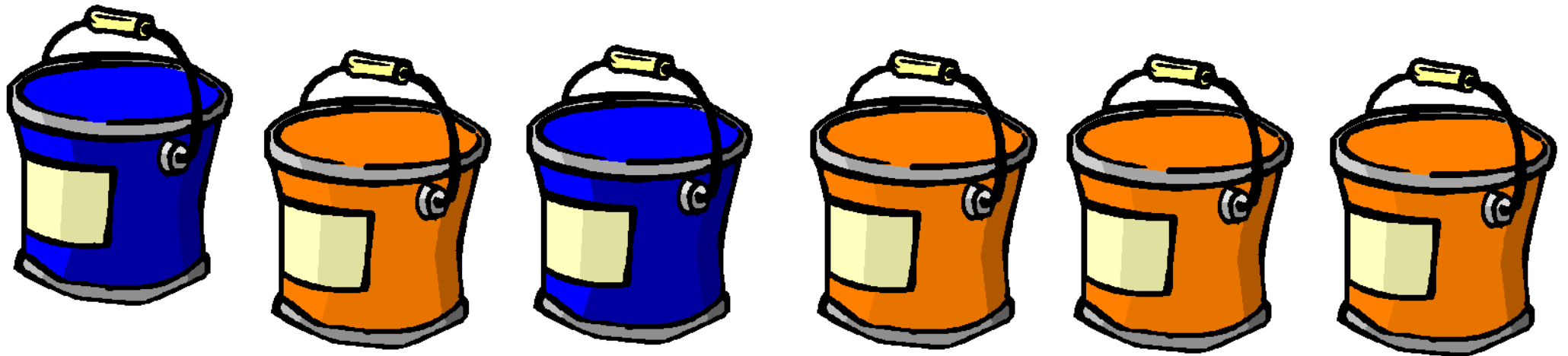
0.8 are **pears** (4 divided by 5)

20% are **apples**

80% are **pears**

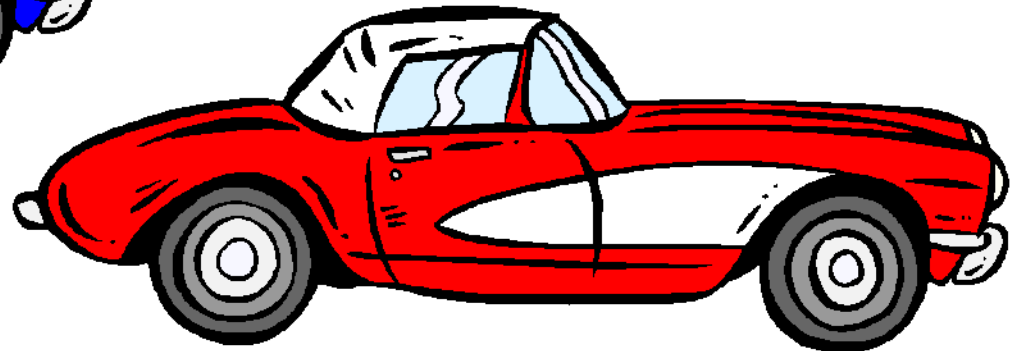
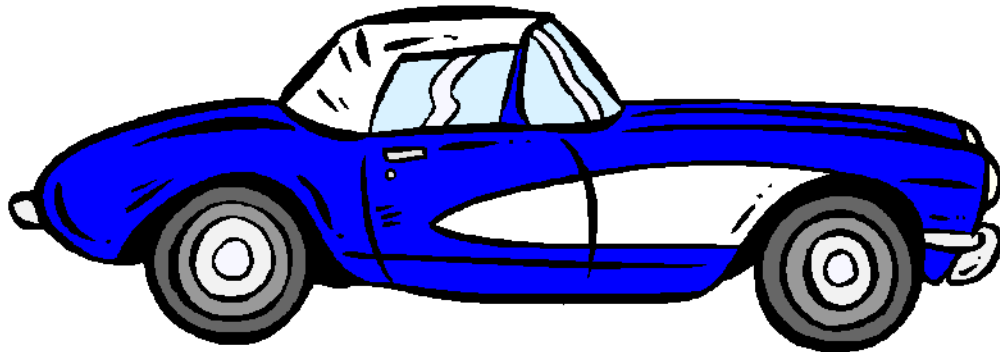
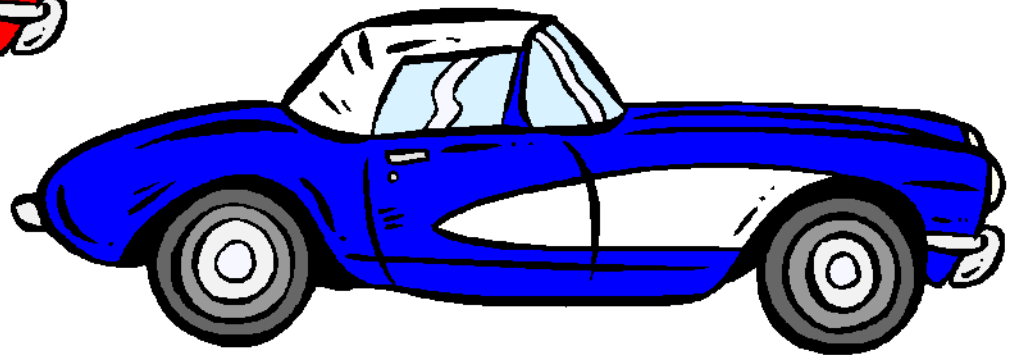
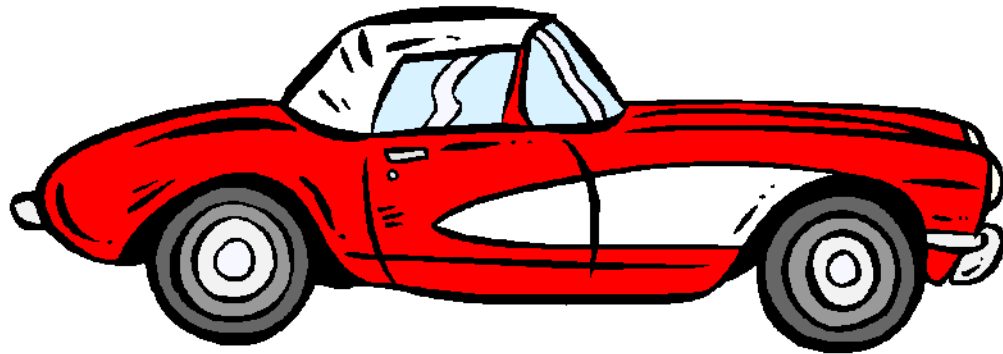
What's the Ratio?

What is the ratio of orange to blue paint?



What's the Ratio?

What is the ratio of red cars to blue cars?



Ratio Problems

A chicken has to be cooked for **30 minutes** for every **kilogram**.

That's a ratio of **30:1**

My chicken weighs **3kg**, how long will I need to cook it for?



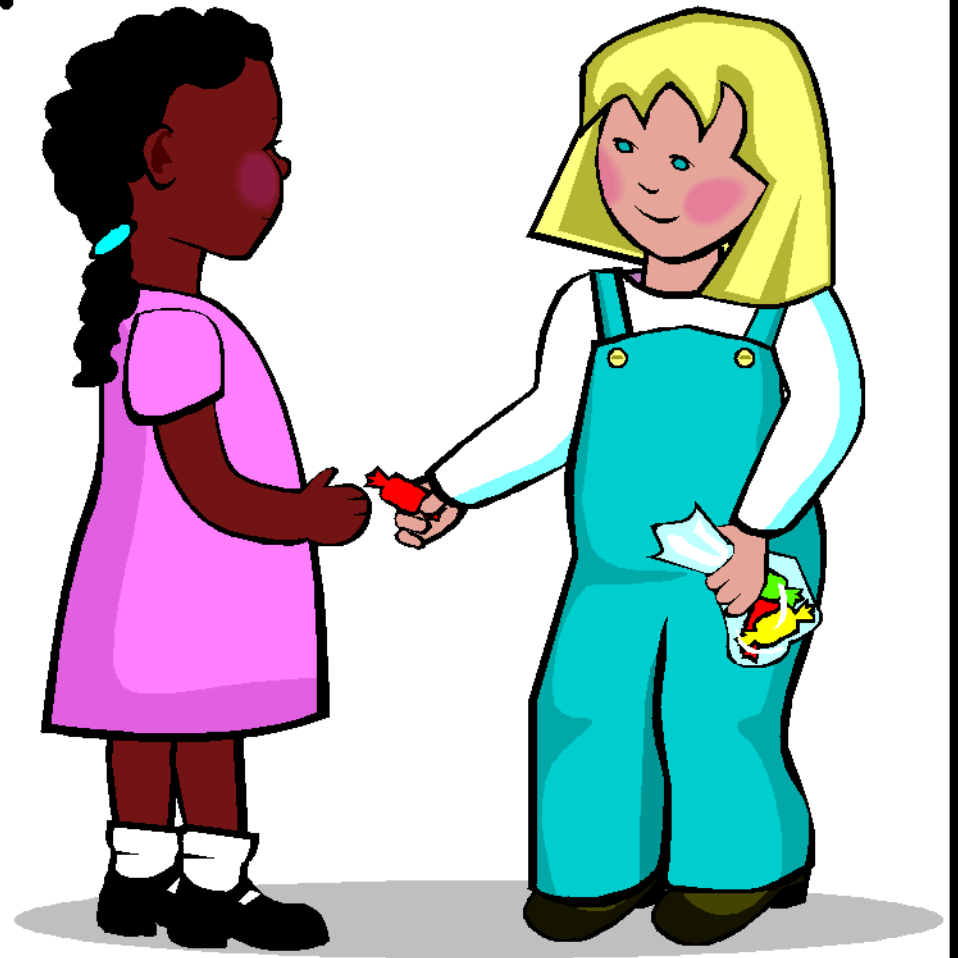
Ratio Problems

Sarah shared out her sweets.

For every sweet she gave to **Alice** she gave herself **3** sweets.

That's a ratio of **1:3**

She had 16 sweets altogether. How many sweets does each girl get?



Recipe Ratios

**Cupcake Recipe
(makes 10 cupcakes)**

100g margarine

120g caster sugar

2 eggs

150g flour



How many cupcakes can I make with 6 eggs?

How much of each ingredient will I need if I want to make 20 cupcakes?