

## Understanding formulas

The word '**formula**' is used in different ways. For example:

- formula 1 motor racing
- baby-milk formula
- chemical formulas (eg  $H_2O$ ,  $CO_2$ )



In maths the word '**formula**' refers to a rule for working something out. For example:

Area of a rectangle = length  $\times$  width

This can be written using **letters to stand for the quantities**:

A (area) = l  $\times$  w (length  $\times$  width)



width 3 cm

Area =  $8 \times 3 = 24 \text{ cm}^2$

length 8 cm.

Or an **equation** can be used to show the relationship between different quantities.

For example:

5 miles is approximately the same as 8 kilometres

The number of miles  $\approx \frac{5}{8}$   $\times$  the number of kilometres.

(NOTE:  $\approx$  means 'approximately equal to'.)