

Guide for Algebra – MAC Calculation policy

The most common use of algebra across the curriculum will be in the use of formulae.

When transforming formulae pupils will be taught to use the 'balancing' method where they do the same to both sides of an equation.

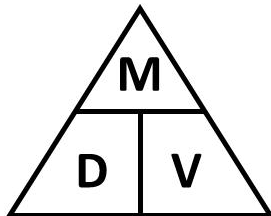
eg (i) $A = lb$ Make b the subject of the formula

$$[\div l] \quad \frac{A}{l} = b$$

However, in some cases triangles can be useful for specific cases.

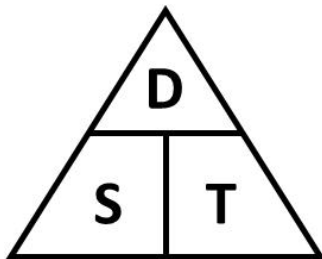
Compound Measures

For example with **Mass, Density and Volume:**



Density = $\frac{\text{Mass}}{\text{Volume}}$, **Mass** = Density x Volume , **Volume** = $\frac{\text{Mass}}{\text{Density}}$

Similarly with **Distance, Speed and Time:**

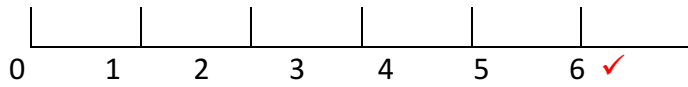


Speed = $\frac{\text{Distance}}{\text{Time}}$, **Distance** = Speed x Time , **Time** = $\frac{\text{Distance}}{\text{Speed}}$

Plotting Points Coordinates

When drawing a diagram on which coordinates have to be plotted some pupils will need to be reminded that the numbers written on the axes must be on the lines not in the spaces.

eg



NOT



Axes

When drawing graphs to represent experimental data it is usual to use the horizontal axis for the variable which has a regular class interval.

eg In an experiment in which temperature is taken every 5 minutes the horizontal axis would be used for time and the vertical axis for temperature.

Having plotted coordinates pupils can sometimes be confused as to whether or not they should join them. If the results are from an experiment then a 'line of best fit' will usually be needed. Further details appear in the following section on Data Handling.