

## O level mathematics by Anon

### Standard form

Many measurements require very large numbers for example speed of light is 300000000 m/s.  
This figures can be conveniently written as:

$$3.0 \times 10^8 \quad \text{(Correct to 2 significant figures)}$$

This way of writing a figure is known as standard form or scientific notation.

Another example can be the wavelength of violet light which is 0.000038cm.  
It can be written as:

$$3.8 \times 10^{-5} \quad \text{(Correct to 2 significant figure)}$$

So a general rule for all figure in written in standard form or scientific notation is:

$$A \times 10^n, \text{ where } 1 \leq A < 10 \wedge n \text{ is an integer}.$$