Ohm's law

Ohm's law is used to describe the relationship between Voltage (V), Current (I) and Resistance (R).

If you know any of two of these values it is possible to calculate the third. Ohm's law can be arranged in the following three ways depending on what you want to calculate.

V = I x R

I = V / R

R = V / I

Note: V = Voltage in Volts, I = Current in Amps, R = Resistance in Ohm's

The Ohm's law triangle

A very useful tool that can be used when doing one of the above calculations is the Ohm's law triangle shown below. The triangle is used by covering the item which you wish to calculate. The two items that are not covered will then be left in the arrangement required to calculate the covered item.

For example if you want to calculate R you would cover that item. The two remaining items are arranged as V/I. This is the formula to calculate R.