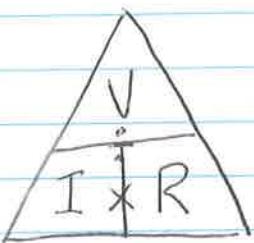


## Ohm's Law

The current through a conductor is directly proportional to the voltage and inversely proportional to the resistance.

$$\boxed{I = \frac{V}{R}}$$

I = current  
V = voltage  
R = resistance



$$V = IR$$

$$R = \frac{V}{I}$$

Units of current = ampere [A]

units of voltage = volt [V]

units of resistance = ohm [ $\Omega$ ]

current is the net movement of electric charges in a single direction

One ampere =  $6.25 \times 10^{18}$  electrons flowing past a point per second.

voltage is how much electric potential each charge receives.

resistance is the tendency to oppose the flow of electrons or charged particles.