

Ohm's Law

$$V = I \cdot R$$

V = Voltage (volts)

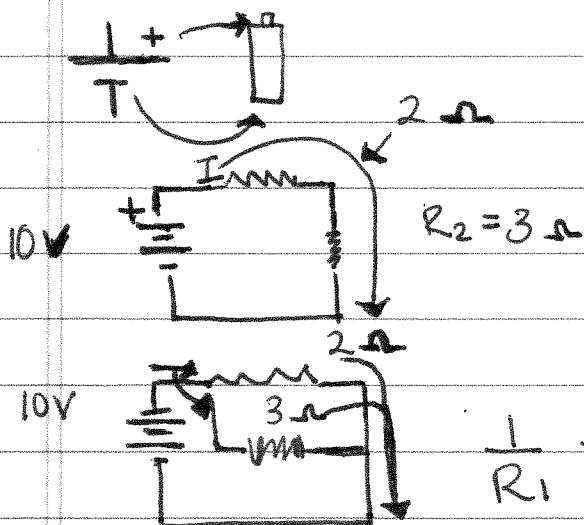
I = Current (amps)

R = Resistance (ohm, Ω)

1 • Columb
1 • Second

Measured in

- One way to increase current is to use more batteries to \uparrow increase the voltage
- decrease the voltage \downarrow decrease current.
- Adding resistance and parallel and that increase the current flow.
- having several resistors in parallel is the same as having one resistor with a much smaller resistance.



$$V = IR$$

$$I = \frac{V}{R} = \frac{10V}{5\Omega} = 2 \text{ amps}$$

$$R_{eq} = R_1 + R_2 \text{ (Series)}$$

$$\frac{1}{R_1} + \frac{1}{R_2} = \frac{1}{R_{eq}} = \frac{1}{2} + \frac{1}{3} = \frac{1}{R_{eq}} \rightarrow \frac{3+2}{6}$$

$$\frac{5}{6} = \frac{1}{R_{eq}}$$

$$\frac{6}{5} = 1.2 = R_{eq}$$

$$\frac{10}{6.5} = \frac{10.5}{6} = \frac{50}{6}$$