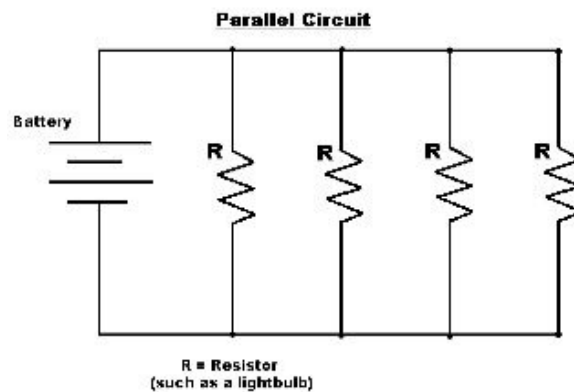
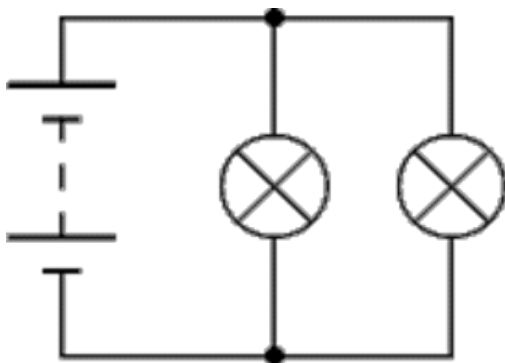
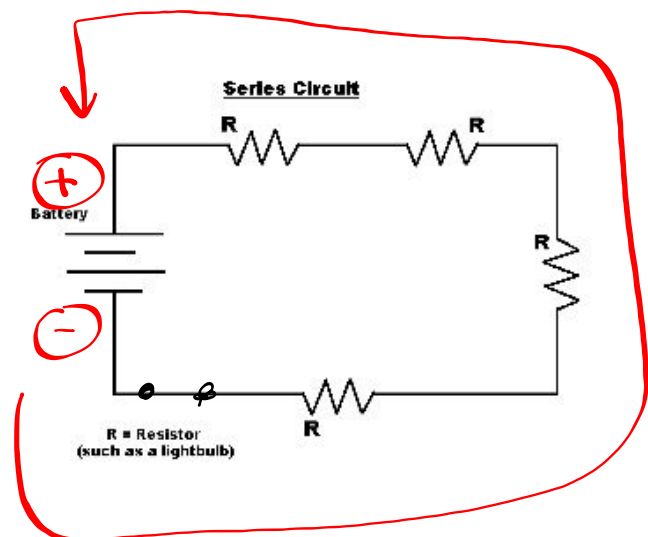
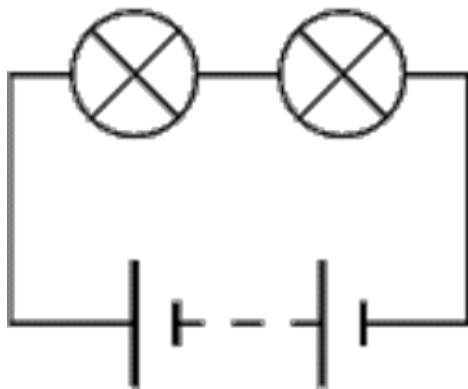


## Electric Circuit

- involves the flow of electrons from one place to another
- must contain four aspects: source, control device, conductors, load
- electrons flow from negative terminal of source



Voltage (electric potential)     **V**

the energy that each electron has as it leaves the source

(measured in volts)

V

I

Current     **I**

a measure of the rate at which electric charges move past any given point in the circuit (measured in amps)

A

Resistance     **R**

ability of a resistor to impede the flow of electrons (measured in ohms)

$\Omega$

Quantity	Symbol	Unit of Measurement	Unit Abbreviation
Current	I	Ampere ("Amp")	A
Voltage	V	Volt	V
Resistance	R	Ohm	$\Omega$

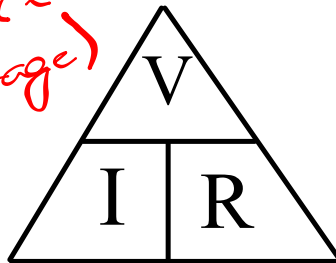
# Ohm's Law

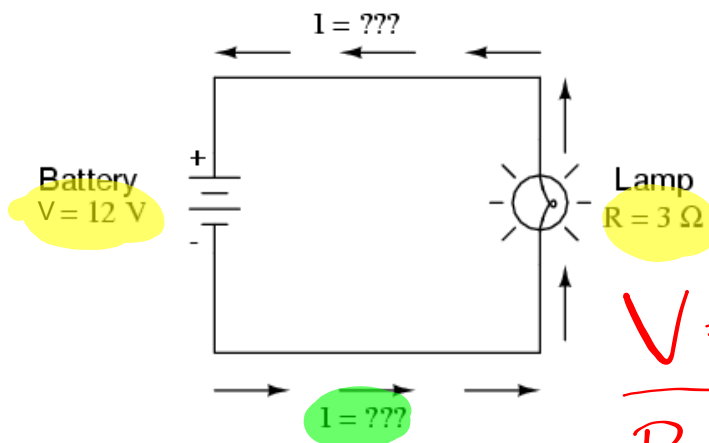
$$V = I \times R$$

potential difference (voltage)

current (A)

resistance ( $\Omega$ )



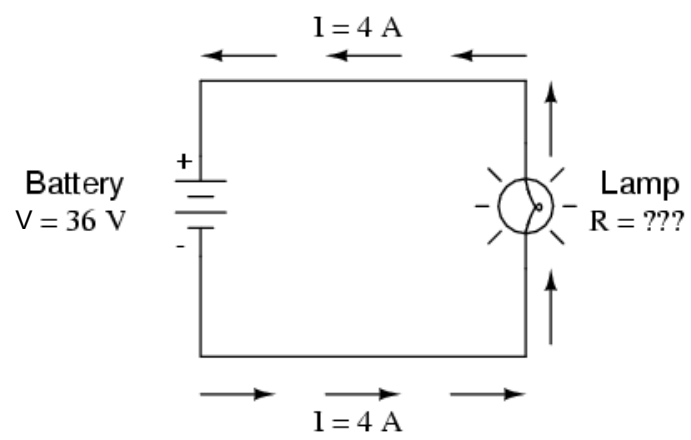


$$\frac{V}{R} = \frac{I \times R}{R}$$

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

$$I = \frac{12V}{3\Omega}$$

$$I = 4A$$



p. 319 #1-5

## Attachments

---

Answers Series and Parallel Circuit Assignment.notebook