

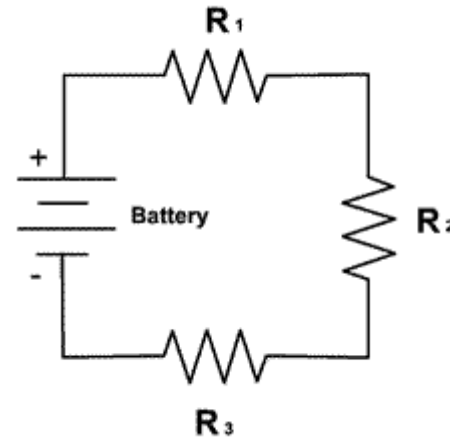
Parallel and serial connections

Serial connection:

Current the same. Voltage adds up.

$$I_{total} = I_1 = I_2 = I_3$$

$$U_{total} = U_1 + U_2 + U_3$$

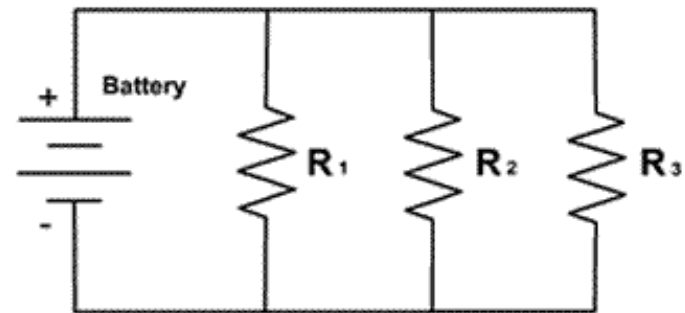


Parallel connection:

Voltage the same. Current adds up.

$$U_{total} = U_1 = U_2 = U_3$$

$$I_{total} = I_1 + I_2 + I_3$$



Homework 22

- a) Sketch a circuit that consists of a 3.5V battery and two LEDs, connected in parallel.
- b) The plot below shows a current that flows via different LEDs at a given voltage. Based on these data, find the total current flowing via the battery in your circuit. The two LEDs used are Red and Yellow.
- c) What is the power consumed by each of the LEDs in your circuit?

