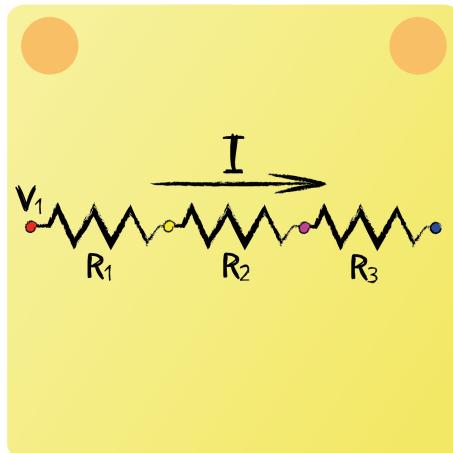


# Lecture 01 - Energy 02

An current of  $I$  moves through an electrical circuit. Give an expression for the electrical energy delivered by the circuit within a time span of  $\Delta t$  seconds.



Electrical power:

$$P = I^2 \cdot R = I^2 \cdot (R_1 + R_2 + R_3)$$

Electrical energy:

$$\Delta E = P \cdot \Delta t = I^2 \cdot (R_1 + R_2 + R_3) \cdot \Delta t$$