

Intro to ECE Toolbox

1 Ohm's law and some basics

1.1 Questions

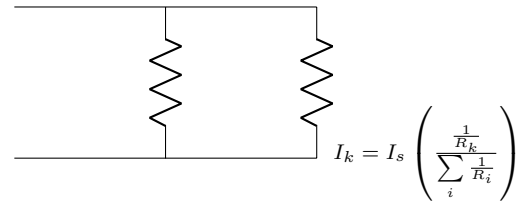
What's the voltage at X ? What's the current through Y ? What's the resistance of Z ? How much power is used by F ?

1.2 Ohm's law

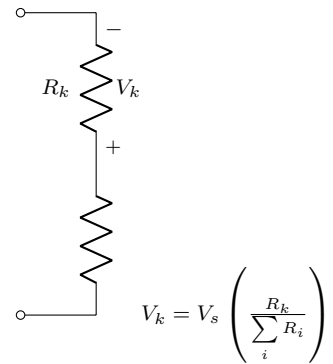
$$V = I \cdot R \qquad I = \frac{V}{R} \qquad R = \frac{V}{I} \qquad P = RI^2 = VI$$



1.3 Current Division

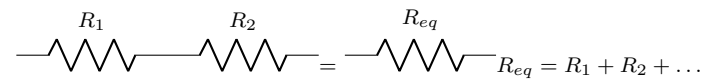


1.4 Voltage Division



1.5 Resistor Reduction

1.5.1 Series



1.5.2 Parallel

1.6 Component Order