

1 | Calculations Surrounding a Circuit

There are two ways to calculate the resistance within a circuit. In reality, they are all based on the same set of rules — but one way applies them directly and the other uses a higher-level abstraction that is often easier.

Either way, this is the rule that rules them all: **through a resistor, the Current does NOT change, the Voltage drops.**

1.1 | Kirkoff's Laws

These are the basic rules of circuit calculation: **Kirkoff's Laws**

1.2 | Combining Resistors Method

Combining resistors is a generalization of the Kirkoff's Laws to make calculating circuits easier. **Combining Resistors**