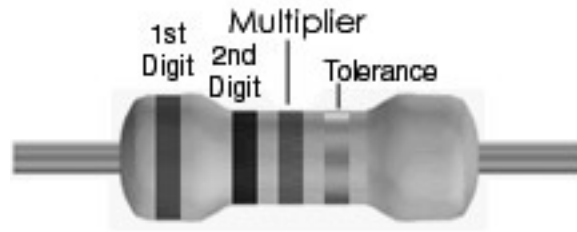


THINGS TO REMEMBER

RESISTOR COLOR CODE



1st Digit 2nd Digit x 3rd Digit (MULTIPLIER)

Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Gray	White	Gold	Silver	No Band
0	1	2	3	4	5	6	7	8	9	5%	10%	20%

Example:

BROWN(1) – BLUE(6) – RED(2) – SILVER(10%) = $16 \times 10^2 = 1.6 \times 10^3 = 1.6 \text{ k}\Omega \pm 10\%$

TOLERANCE

Since the tolerance is 10%, the **maximum value** that we can have is:

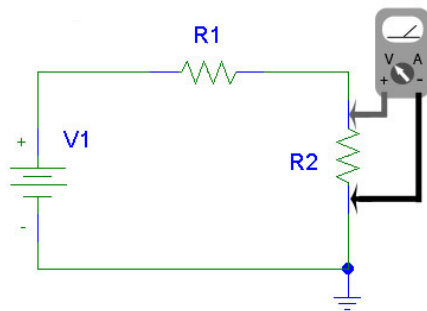
$$1.6 \text{ k}\Omega + (1.6 \text{ k}\Omega \times 10\%) = 1.76 \text{ k}\Omega$$

and the **minimum value** that we can have is:

$$1.6 \text{ k}\Omega - (1.6 \text{ k}\Omega \times 10\%) = 1.44 \text{ k}\Omega$$

MEASURING VOLTAGE AND CURRENT

VOLTAGE

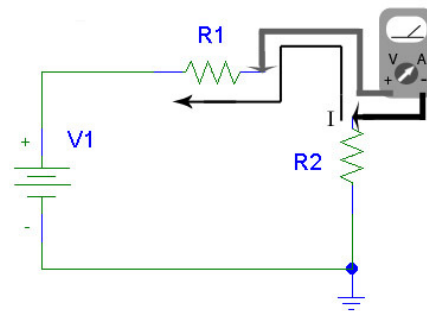


When measuring voltage:

Make sure that the multimeter is set to measure VOLTS (V).

To measure voltage over a component, place the leads over the component.

CURRENT



When measuring current:

Make sure that the multimeter is set to measure CURRENT (I).

To measure current in a circuit, the circuit must be broken and the multimeter placed within the circuit so all current flows through the meter.