

Question#19752

A 10 ohm resistor is connected in series with a 15 ohm resistor. If this circuit is connected to a 9 volt battery, what will be the resultant current?

Answer:

According to the Ohm's law the result current will be:

$$I = \frac{V}{R_z}, \text{ where } R_z - \text{the total resistance of circuit}$$

For series connection:

$$R_z = R_1 + R_2$$

$$I = \frac{V}{R_1 + R_2}$$

$$I = \frac{9}{10+15} = 0.36 \text{ A}$$

**Answer: 0,36 A**