Answer on Question #38284 - Physics - Electric Circuits

Find resistance in the circuit when 200mA current flows when connected to a battery having a potential difference of 12v

Solution:

Ohm's law states that

$$I = \frac{U}{R}$$

If we know the current and voltage you can find the resistance in the circuit:

$$R = \frac{U}{I} = \frac{12V}{200 \times 10^{-3} A} = 60 \text{ ohm}$$

Answer: resistance in the circuit is equal to 60 ohm.