

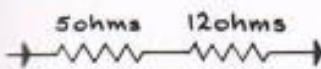
## POW #3 – Resistance of Electrical Circuits

Due **Tuesday** September 11<sup>th</sup> 2018 at the beginning of class.

### PROBLEM OF THE WEEK

The following examples show how the total resistance of electrical circuits, measured in ohms, can be found.

SERIES:



$$R = 5 + 12 \\ = 17$$

PARALLEL:



$$\frac{1}{R} = \frac{1}{10} + \frac{1}{5} + \frac{1}{20} \\ = \frac{7}{20} \\ R = \frac{20}{7}$$

Find the total resistance for the circuit shown in the following diagram. Express the answer as a fraction in lowest terms.

