**CONNECTING RESISTORS IN PARALLEL USING PHET**

1.Select Phet "circuit construction" in "realistic visualization".

2. Assemble the circuit connecting two resistors in parallel, with the ammeters as shown in the image and with the switch open.

3. Measure successively with the voltmeter the voltage at the ends of the source and the voltage

at the ends of each resistor and record these values

SOURCE VOLTAGE V = …………………

VOLTAGE AT THE END OF R 1 V 1= …………………

VOLTAGE AT THE END OF R 2 V 2= …………………

What relationship connects the above trends?

……………………………………………………………………………………

4. Record the current measured by the ammeters.

CURRENT LEAKAGE THROUGH THE SOURCE I=…………………..

CURRENT FLOWING THROUGH R 1 I1=…………………..

CURRENT FLOWING THROUGH R 2 I2=…………………..

What is the relationship between the above currents?

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4. Based on the values of the voltages and currents you found, calculate the values of the resistances R 1 and R 2, as well as the total resistance R ωλ of the system of the two resistors.

R 1=…………………. R 2=…………………. R total=…………… …..

Test whether the above values verify the theoretical relationship



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