Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab table # \_\_\_\_\_ at: 12:00 / 3:00 / 6:00

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Circuit diagram

Paste the picture of your circuit diagram here. Be sure to label all your resistors (R1, R2 … or something similar) and write down their values (in ohms). Also clearly write down your input voltage, in V.

# Solve the circuit

Solve the circuit and add your calculated currents and voltage drops to the circuit diagram; take a pic and insert it here. Also fill in the first three columns of the voltages table and the first empty column of the currents table (below).

# Compare to measurements

Use the multimeter in voltmeter mode to measure all the voltage drops across the resistors. Fill in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Resistor name**  | **Resistor value (Ω)** | **Calculated ΔV (V)** | **Measured ΔV (V)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Use the multimeter in ammeter mode to measure the total current from your voltage supply, as well as the current in each of the two main legs of the circuit.

|  |  |  |
| --- | --- | --- |
| **Current name** | **Calculated I (A)** | **Measured I (A)** |
| Total current |  |  |
| Current in left leg |  |  |
| Current in right leg |  |  |

# Check consistency

Are all your measured voltages and currents consistent with Kirchhoff’s laws?