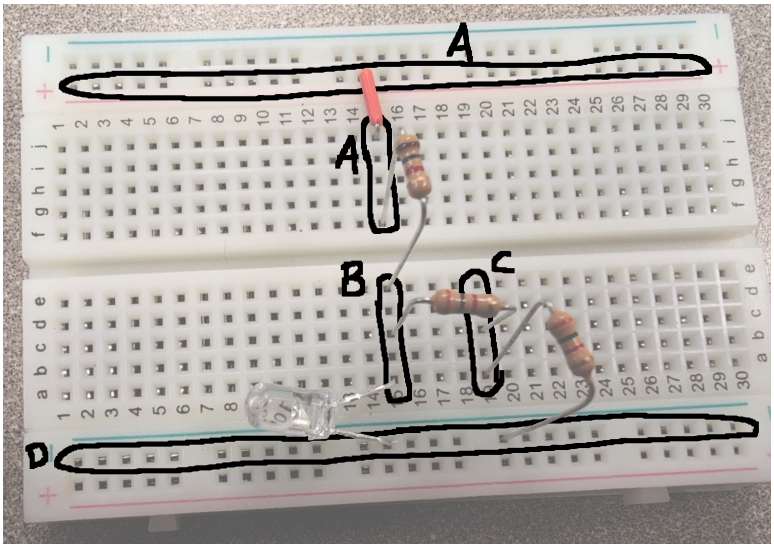
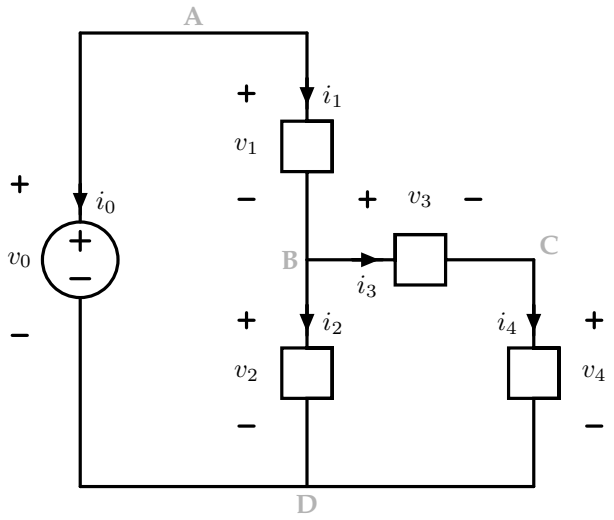
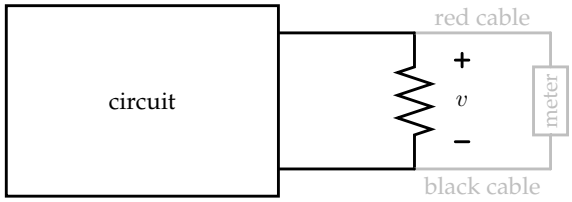

A
A
B
C
D


A
+
i_1
v_1
−
+
v_3
−
+
i_0
v_0
−
B
C
i_3
+
i_2
i_4
+
v_2
v_4
−
−
D

Multimeter Basics

Measuring a Voltage

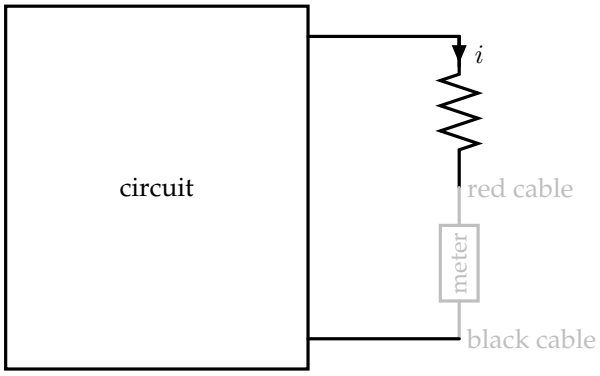
- Click the little wheel over to one of the settings under V with the solid and dashed lines next to it (not the squiggle) to indicate that we want to measure a DC voltage.
- Hook the meter up with the red connector on the "+" side of the voltage variable you want to measure, and the black cable on the "-" side. You can make this connection directly to existing components, or by connecting the clip to a piece of wire and plugging it into the corresponding node on the breadboard.



- The different subsettings under V correspond to different orders of magnitude we can measure; we'll need to find the right one by clicking between them (after we've connected things up; see below).
  - A reading of "0L" means that the value being measured is too big for this setting; try clicking up.
  - If you're just seeing 0's, maybe what you're measuring is too small; try clicking down.
  - Note that an SI prefix might be displayed near the top of the screen, indicating the order of magnitude of the measurement.

Measuring a Current

- Click the little wheel over to one of the settings under A to indicate that we want to measure a DC current.
- Adjust the circuit so that all of the current will flow through the meter. Do this by *unplugging* one side of the component and using the meter to make the connection again. This connection should be made such that the red connector is on the "tail" side of the arrow representing our current, and the black connector is on the "head" side of the arrow.



- As with measuring a voltage, you may need to click around between different orders of magnitude on the multimeter to get an accurate measurement.

Name: _____

Kerberos Username: _____

KVL equation for indicated loop:

Measured voltages for each term:

KCL equation at indicated node:

Measured currents for each term: