LAB #75

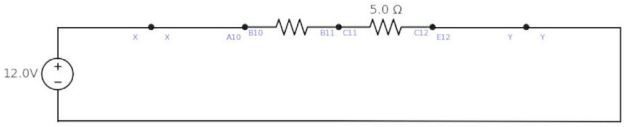
STEP 6

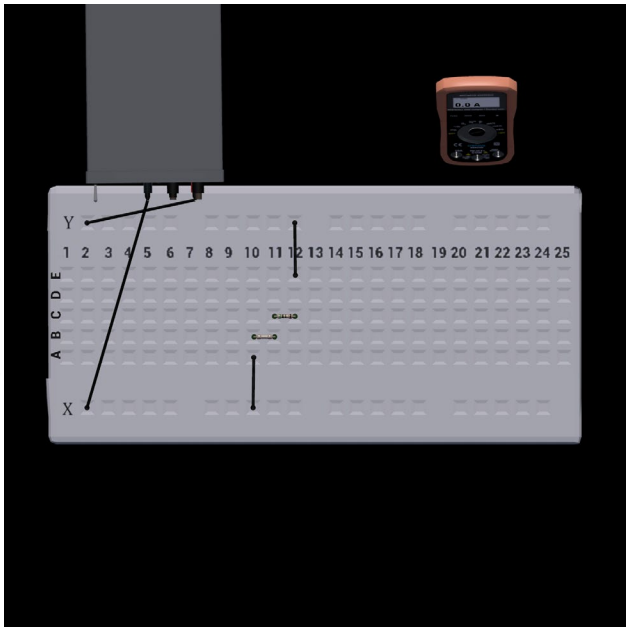
Source Voltage: 12.0 V

STEP 10

Known Resistor Resistance: $50 * 10^{-1} \pm 1\% \ \Omega$

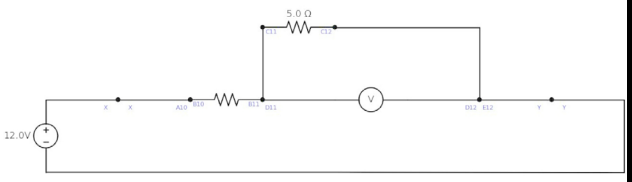
STEP 13

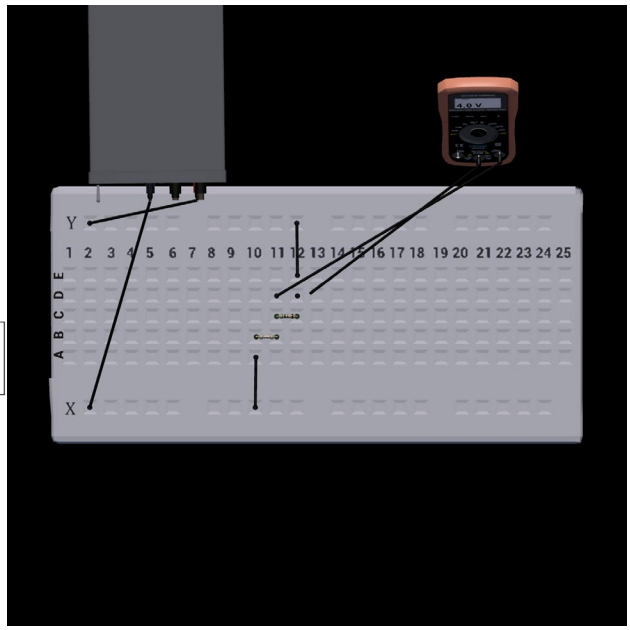




STEP 17

Known Resistor Voltage: 4.0 V





STEP 19

Known Resistor Current:

By Ohm's law : V=RI → I = 4.0 V / 5 Ω = 0.8 A

By Kirchhoff law, it's the current of the entire system.

STEP 20

Kirchhoff Law : $P = V_1 + V_2$

$V_2 = 12.0\ V - 4.0\ V = 8.0\ V$

By Ohm's law : V=RI → R = 8.0 V / 0.8 A = 10.0 Ω