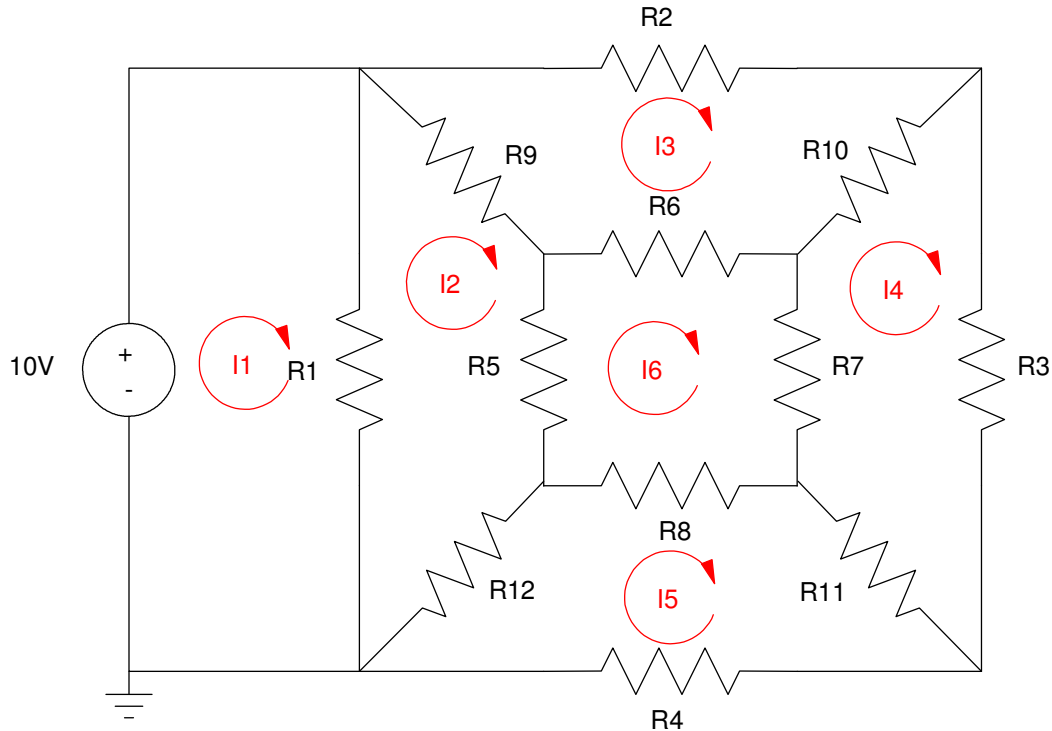


# EE 211: Lab #4

Current Loops: 2 people per group

Using the resistor cube you built last week, attach +10V to one corner and 0V to the other corner



Record the resistor values (should be the same as you used in Lab 1)

|    |    |    |     |     |     |
|----|----|----|-----|-----|-----|
| R1 | R2 | R3 | R4  | R5  | R6  |
|    |    |    |     |     |     |
| R7 | R8 | R9 | R10 | R11 | R12 |
|    |    |    |     |     |     |

- 1) Write the current loop equations for this circuit
- 2) Solve for  $I_1 \dots I_6$
- 3) Using PartSim, simulate this circuit and determine the currents  $I_1 \dots I_6$
- 4) Apply +10V and 0V to your circuit and measure the currents

note: You probably have to measure the voltage across a resistor and compute the current

| Loop | Currents - Lab #3 |           |          |
|------|-------------------|-----------|----------|
|      | Calculated        | Simulated | Measured |
| 1    |                   |           |          |
| 2    |                   |           |          |
| 3    |                   |           |          |
| 4    |                   |           |          |
| 5    |                   |           |          |
| 6    |                   |           |          |