## EE 206: Homework #2

Electrical Quantities, Kirchoff's Laws, Resistors in Series and Parallel. Due Monday, January 27th Please make the subject "EE 206 HW#2" if submitting homework electronically to Jacob\_Glower@yahoo.com (or on blackboard)

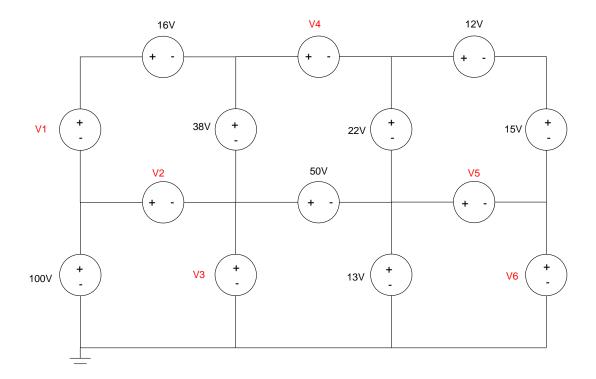
## **Electrical Quantities:**

1) A resistor has the following volts / amps / resistance / power. Determine the missing parameters:

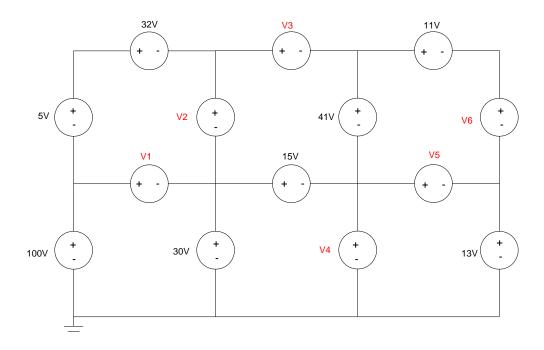
| Volts | Amps | Ohms | Watts |
|-------|------|------|-------|
| 10    | 2    |      |       |
|       |      |      |       |
| 10    |      | 4    |       |
|       |      |      |       |
|       | 3    |      | 20    |
|       |      |      |       |
| 10    |      |      | 40    |
|       |      |      |       |

## **Kirchoff's Laws:**

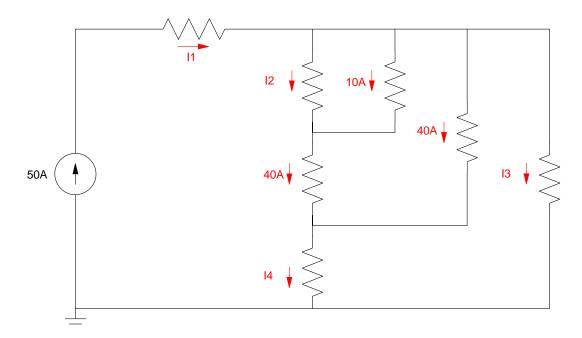
2) Use conservation of voltage to determine the unknown voltages



3) Use conservation of voltage to determine the unknown voltages



- 4) Use conservation of current to determine the unknown currents
- 5) Change the 50A source to 20A. Use conservation of current to determine the unknown currents. (note: some of the currents may be negative).



Problem 4 & 5