## ECE 111 - Homework \#5

Week \#5: EE 206 Circuits I. - Due 8am Tuesday, February 15th

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

| Volts | Amps | Ohms | Watts |
| :---: | :---: | :---: | :---: |
| 24 V | 1.5 A |  |  |
| 24 V |  | 4 |  |
|  | 1.5 A |  | 30 |
| 24 V |  |  | 400 |

## Kirchoff's Laws:

2) Use conservation of voltage to determine the unknown voltages

3) Use conservation of current to determine the unknown currents


## Resistors in Series and Parallel

4) Find the total resistance seen by the 10 V source
5) Use voltage division to find V1, V2, and V3.
6) Use CircuitLab to find V1, V2, V3, and the total resistance seen by the 10 V source.

