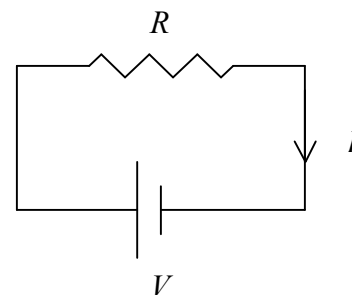
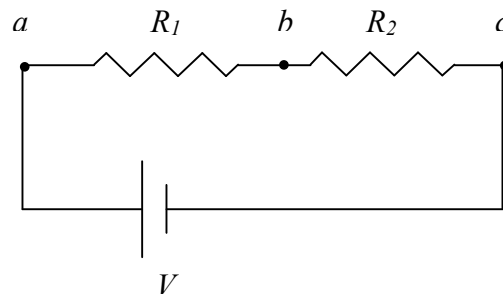


W11.01 Resistor Circuits 1

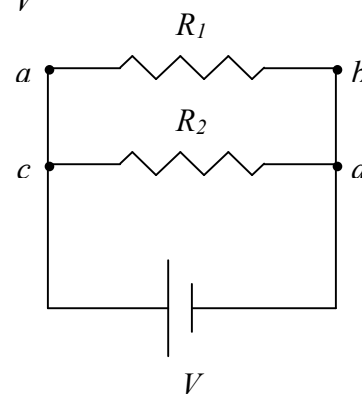
1. I is 2 amps and V is 6 volts.
 - a. What is R ?
 - b. If the resistance was halved, what would happen to the current?
 - c. If the voltage of the battery was tripled, what would happen to the current?
 - d. How many junctions are in this circuit?



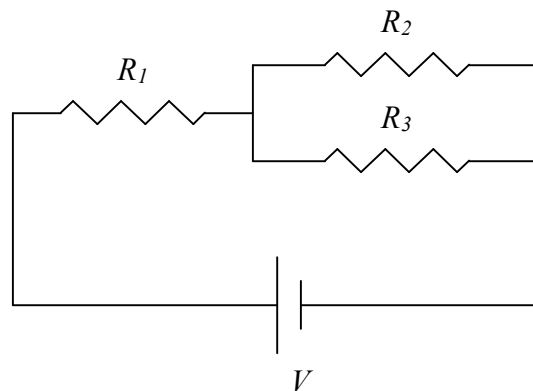
2. V is 12 volts, R_1 is $2\ \Omega$, and R_2 is $1\ \Omega$.
 - a. How much does potential drop from a to b ?
 - b. How much does potential drop from b to c ?
 - c. What is the current through the battery?
 - d. What is the current through R_1 ?
 - e. If R_1 and R_2 were bulbs, which would be brighter?



3. V is 12 volts, R_1 is $2\ \Omega$, and R_2 is $1\ \Omega$.
 - a. How much does potential drop from a to b ?
 - b. How much does potential drop from c to c ?
 - c. What is the current through R_1 ?
 - d. What is the current through R_2 ?
 - e. What is the current through the battery?
 - f. How many junctions are in this circuit?
 - g. How many branches are in the circuit?
 - h. If R_1 and R_2 were bulbs, which would be brighter?



4. V is 24 volts, R_1 is $3\ \Omega$, R_2 is $12\ \Omega$, and R_3 is $4\ \Omega$.
 - a. Find the current through each resistor.
 - b. Find the potential drop across each resistor.
 - c. Find the total current flow through the battery.



5. V is 24 volts, R_1 is $4\ \Omega$, R_2 is $9\ \Omega$, and R_3 is $3\ \Omega$.
 - a. Find the current through each resistor.
 - b. Find the potential drop across each resistor.
 - c. Find the total current flow through the battery.

