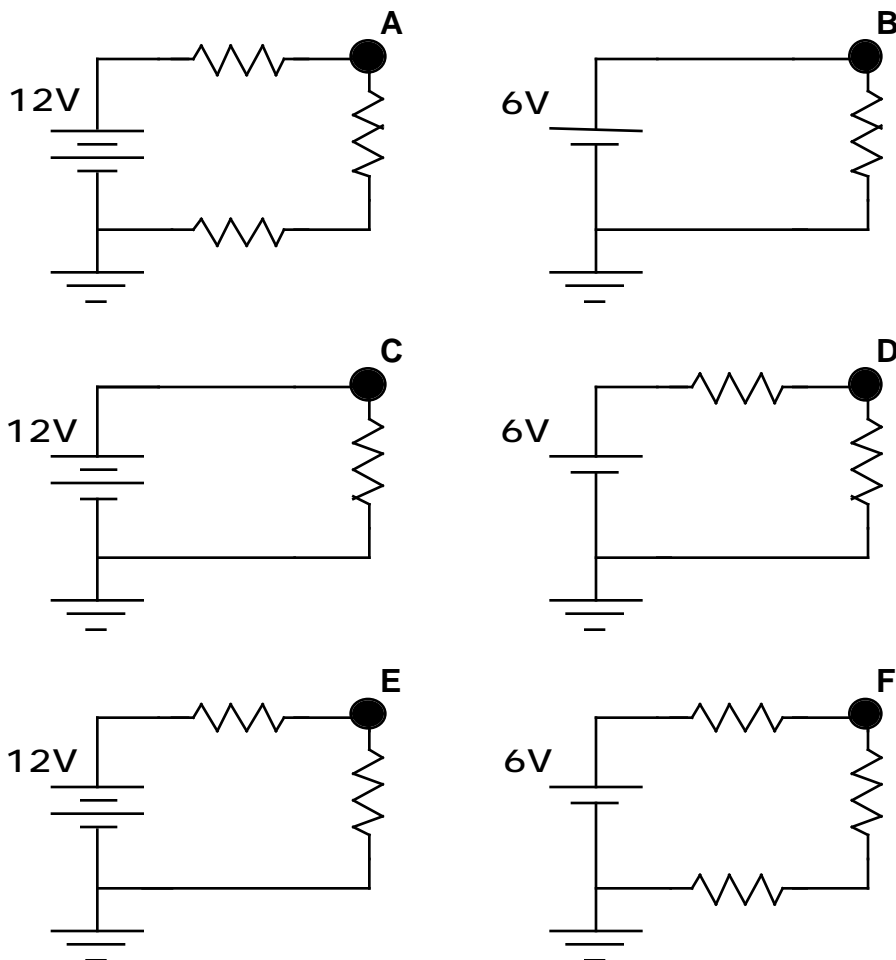


Simple Resistor Circuits—Voltage Drop ¹⁶⁹

All the resistors in the circuits below are identical at 2Ω each. The batteries are ideal with voltages of 6 or 12 volts as shown. All connecting wires have negligible resistance. Rank the voltage at the upper right-hand corner relative to the ground. Place the highest voltage first and the lowest voltage last.



Highest 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ Lowest

Or, all of the voltages are the same. _____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed

Sure

Very Sure

1 2 3 4 5 6 7 8 9 10

¹⁶⁹ C. Hill, C. Lam, M. Mann