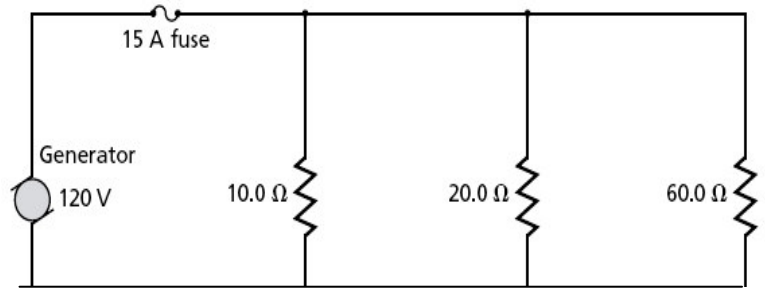


Series-Parallel Circuits Review Problems

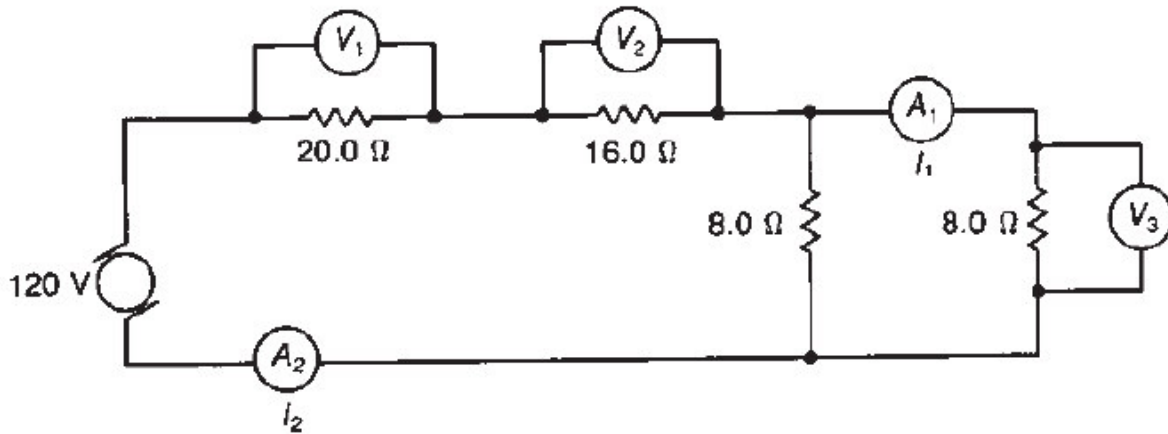
1. Observe the circuit:

- Are the resistors in this circuit connected in series or parallel?
- What is the purpose of the fuse?
- What is the equivalent resistance of the circuit?
- What is the total current flowing in the circuit?
- What is the current through the fuse? Will it melt?
- What is the current through the $10.0\ \Omega$ resistor? The $20.0\ \Omega$ resistor? The $60.0\ \Omega$ resistor?

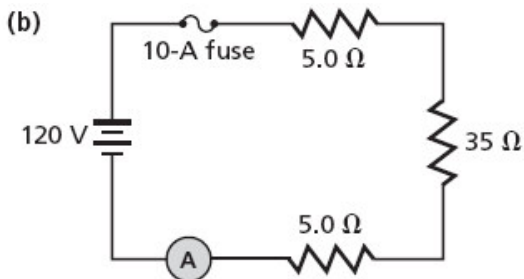


2. Three **identical resistors** in parallel have an equivalent resistance of $7.0\ \Omega$. What is the resistance of each one? If the three resistors were then connected in series across $120\ V$, how much current would flow through the circuit?

3. Find the current in each ammeter and the voltage in each voltmeter.



4. Will the fuse melt in b?



5. Will the fuse melt in c?

