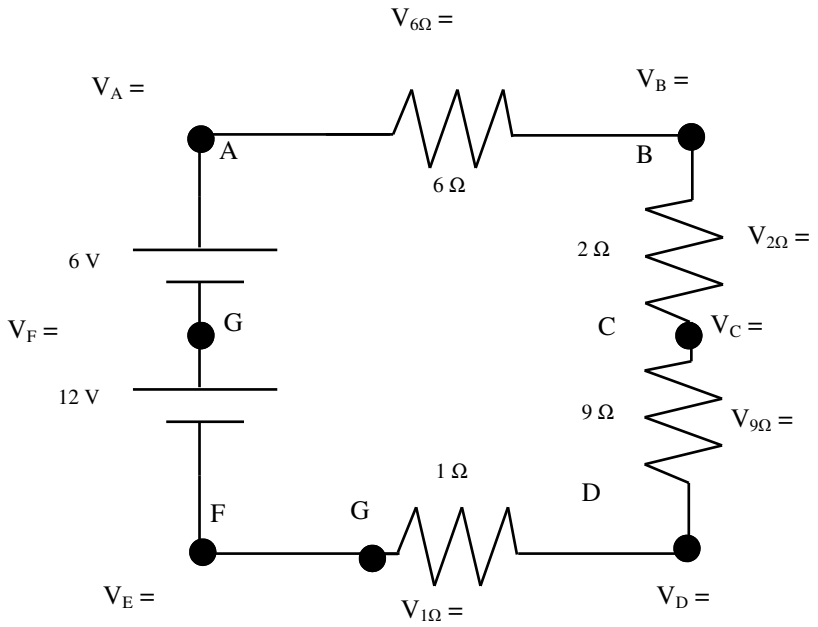
In Class Review 2



1. Batteries _____ voltage. Resistors _____ voltage.
2. Fill in the voltages around the circuit above.

3. Power:
   A. Find the total power of the above circuit:

   B. Find the power used by the 1 Ω resistor.

   C. Find the power dissipated by the 6 Ω resistor.

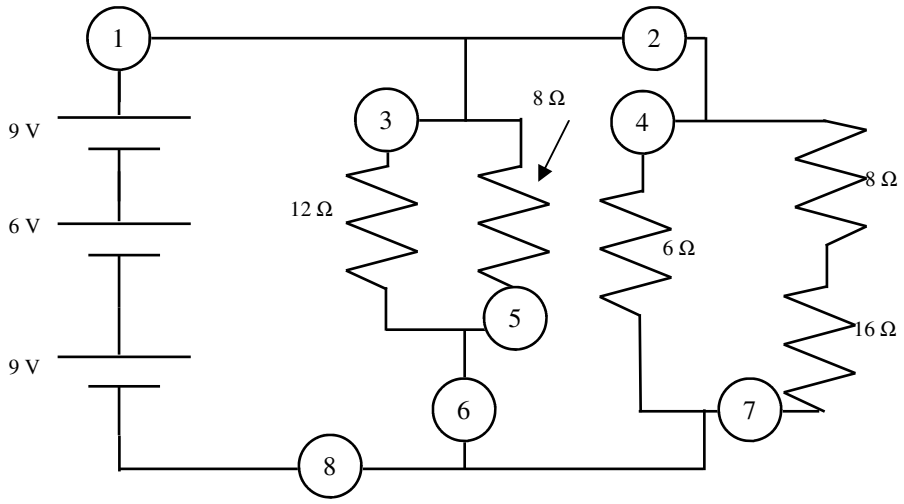
   C. Find the power used by the 9 Ω resistor.

   D. If all the resistors were lights, which would be the brightest?

   E. Which resistor will generate the most heat?

4. What's the current running through the 9 Ω resistor?
5. What's the current running through the 6 v battery?
6. What's the voltage from G to F?
7. What's the voltage from F to A?
8. What's the voltage from B to D?

9. Find the current in each of the amp meters in the following circuits.
   (And label the diagram.)



10. What's the voltage used by the 8 Ω resistor?

11. What's the total power dissipated by the circuit?

12. What's the power dissipated by the 16 Ω resistor?

13. Which branch will be the brightest (if they were lights) and why?

14. A 4 μC charge and a –7.4 μC are 2 mm away from each other.
    Find the force between them.

15. Regarding #1: will they attract or repel?
16. If they touch each other what will happen?
17. If the 2.2 μC charge touches ground what will happen?
18. If the –1.2 μC touches ground what will happen?
19. If your electric company's power rate is $.11 per kWhr, find out how much it costs to run a 90w light bulb 8 hours a night for a month.