

1. During a lightning flash, -15C of charge moves through a potential difference of $8.0 \times 10^7\text{V}$. How much electrical potential energy is released?
2. A spark of electricity jumps from a person's finger to a doorknob. While passing through the air, the spark travels across $2.0 \times 10^4\text{V}$ and releases $3.0 \times 10^{-7}\text{J}$ of electrical potential energy. How much charge in coulombs and how many electrons flow?
3. Problem 1.9
4. Compute the power absorbed by each resistor in problem 1.9. By conservation of power, how much power is being absorbed by the voltage source?
5. Problem 1.12
6. Problem 1.14