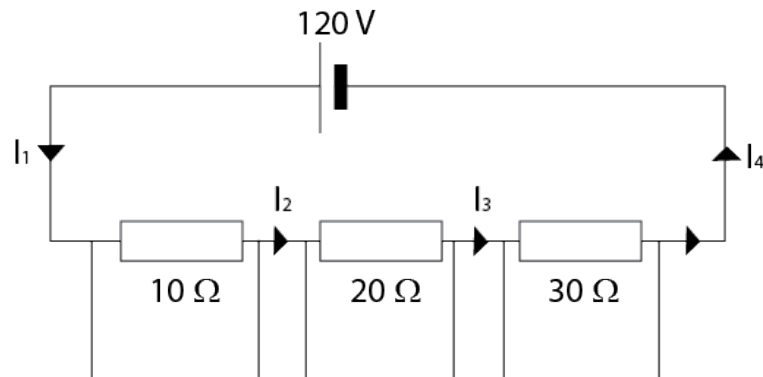


Electricity Homework for NAT 5 Physics

1. If 6.0 C of charge pass through a lamp in 12.0 s then calculate the current in the bulb.
2. If a bulb has a resistance of 6.0 Ω and the potential difference across it is 3.0 V, then calculate the current in the bulb.
3. Look at the series circuit below



- i) Calculate the total resistance of the circuit
- ii) Calculate the current in the circuit.
- iii) What is the current at I_1 , I_2 , I_3 and I_4 .
- iv) Calculate the potential difference across each resistor.
- v) Calculate the power developed in each resistor.
- vi) If the circuit is switched on for 90 minutes, then calculate the total energy used by each resistor.