PP Electrical Circuits – Parallel

1. The length of wire is cut into five equal pieces. The five pieces are then connected in parallel, with the resulting resistance being 2.00 Ω. What was the resistance of the original length of wire before it was cut up?
2. A 4.0 Ω resistor, an 8.0 Ω resistor and a 12.0 Ω resistor are connected in parallel across a 24.0 V battery.
3. What is the equivalent resistance of the circuit?
4. What is the current in each resistor?
5. An 18.0 Ω, 9.00 Ω and 6.00 Ω resistors are connected in parallel to an emf source. A current of 4.00 A is in the 9.00 Ω resistor.
6. Calculate the equivalent resistance of the circuit.
7. What is the potential difference across the source?
8. Calculate the current in other resistors.