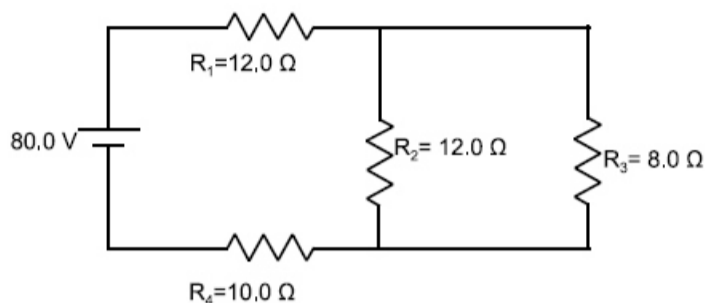




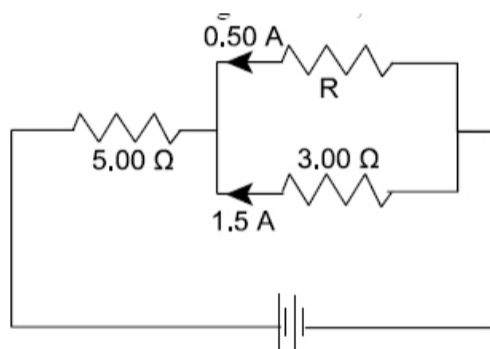
Physics 3204

Unit 2: Section 2 -Current Electricity
Worksheet 9: Circuit Analysis – Part 2

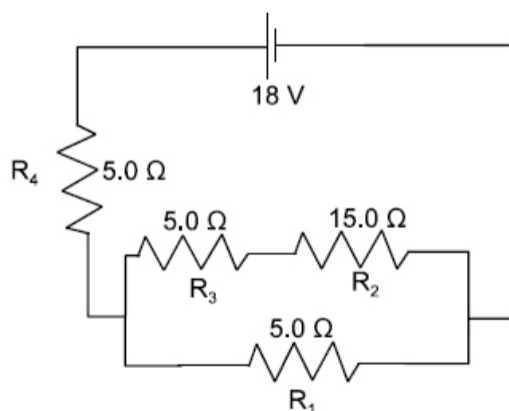
1. Given the circuit in the diagram below, calculate: AUGUST 2007



- (i) the voltage drop across R_1 .
(ii) the current through R_2 .
2. Given the circuit in the diagram below, calculate: JUNE 2007

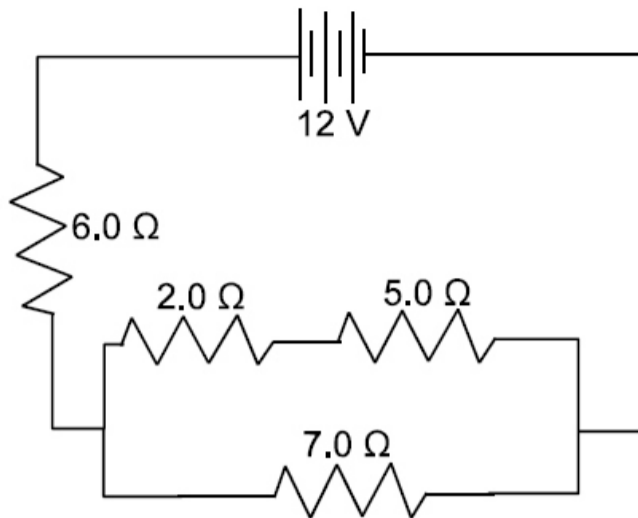


- (i) the current through the 5.00Ω resistor.
(ii) the resistance of R .
(iii) the potential difference across the battery.
3. For the circuit shown in the diagram below, calculate: AUGUST 2006



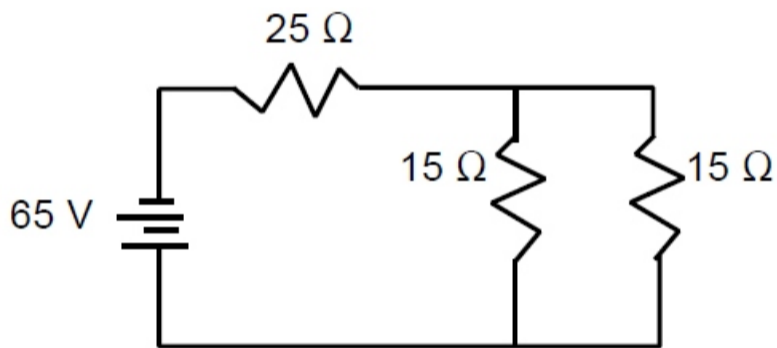
- (i) the total resistance;
(ii) the current through each resistor;

4. For the circuit shown in the diagram below, calculate: June 2006



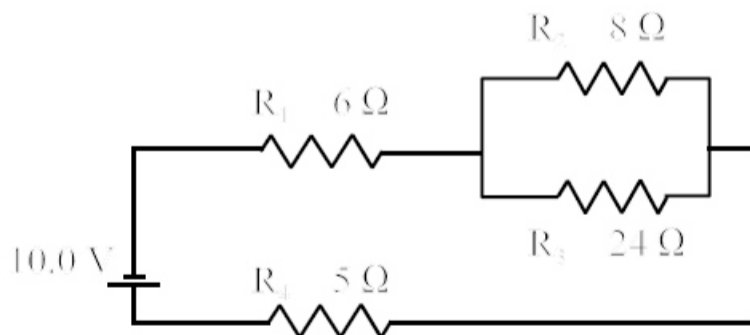
- (i) the voltage across the $6.0\ \Omega$ resistor;
- (ii) the current through the $5.0\ \Omega$ resistor;
- (iii) the power dissipated in the $2.0\ \Omega$ resistor.

5. For the circuit below, calculate: August 2005



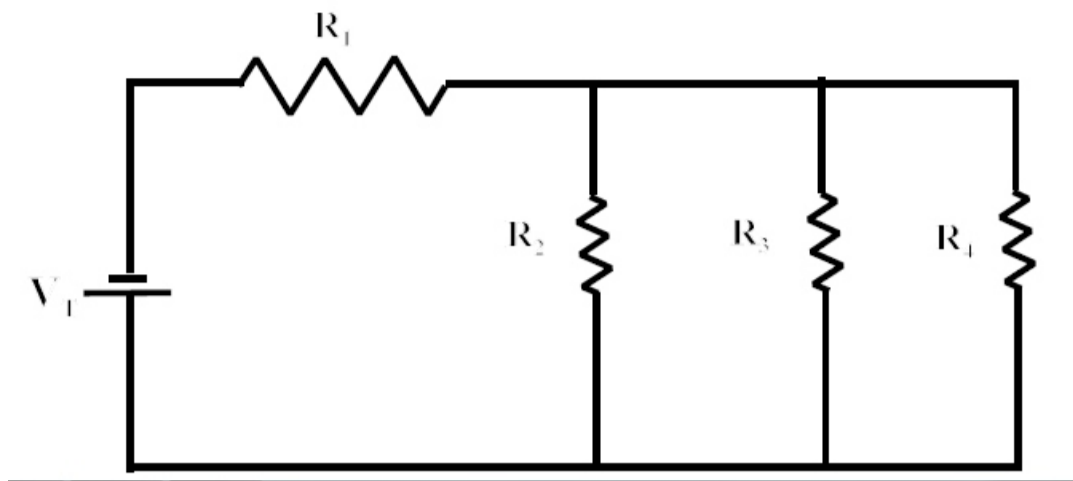
- (i) the total resistance;
- (ii) the current through the $25\ \Omega$ resistor;

6. Use the circuit below to answer questions (i) and (ii). June 2005



- (i) What is the total resistance of the circuit?
- (ii) What is the current through each resistor in the circuit?

7. Complete the table below for the given circuit. Show all workings in the space provided below the circuit diagram. August 2004



	Resistor 1	Resistor 2	Resistor 3	Resistor 4	Total
Voltage (V)		8			
Current (A)					4
Resistance (Ω)	4		16	16	