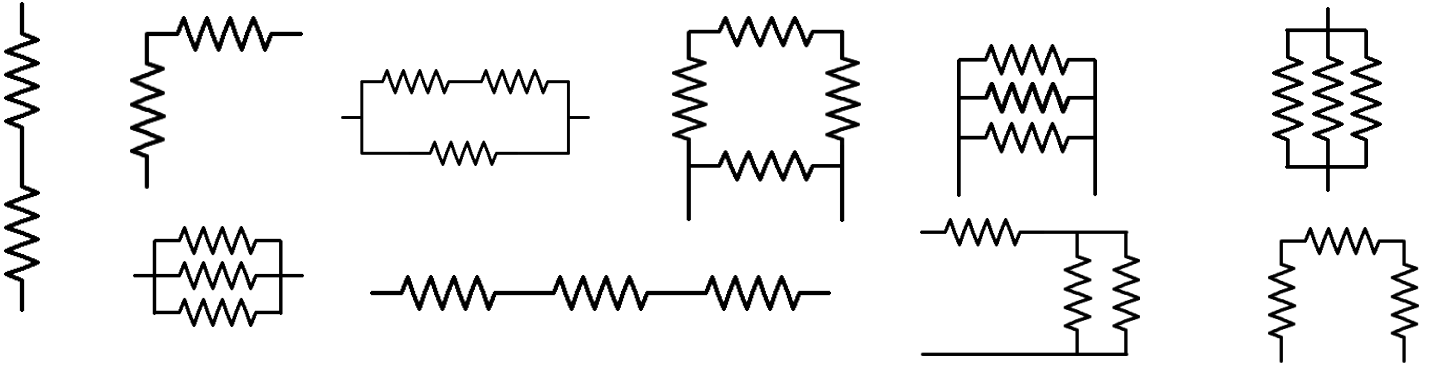
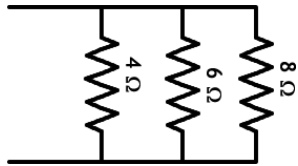
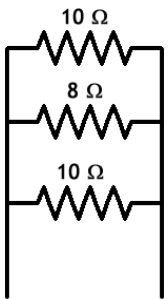


Part 1: Identify the following combinations of resistors below as series, parallel, or complex.

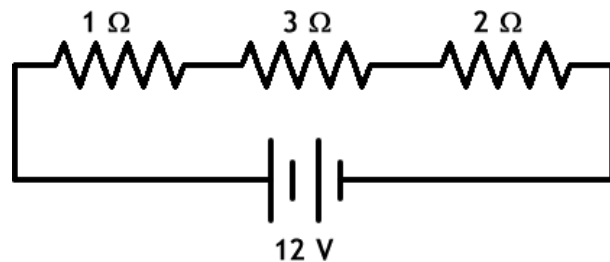
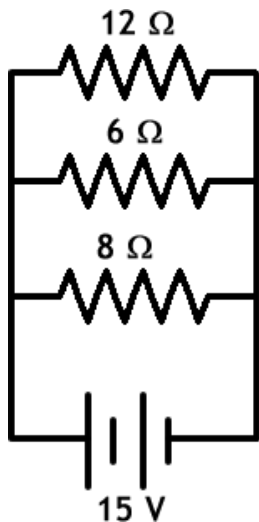
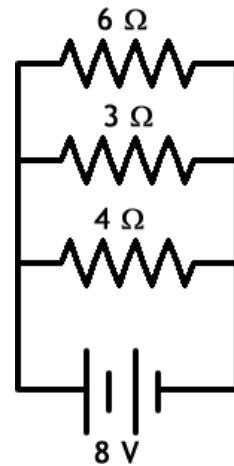
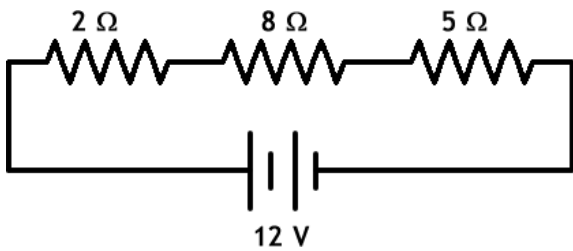


Part 2: Find the equivalent resistances below.



Part 3:

- i) Find the total resistance and total current in the circuit.
- ii) Show the direction of the conventional current through the circuit.

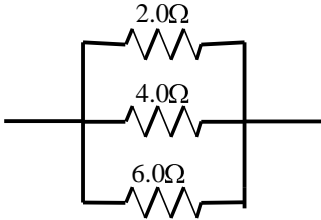


Circuits Worksheet

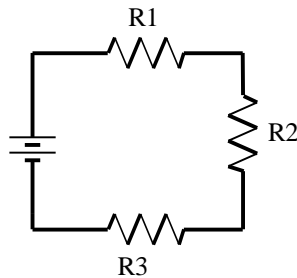
1. Calculate the equivalent resistance of the following combination: $R_{eq} = \underline{\hspace{2cm}}$



2. Calculate the equivalent resistance of the following combination: $R_{eq} = \underline{\hspace{2cm}}$

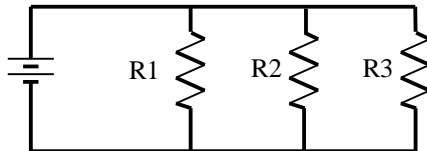


3. Complete the table by calculating the total resistance of the following series circuit. Then calculate total circuit current and the voltage drops and currents for each of the resistors.



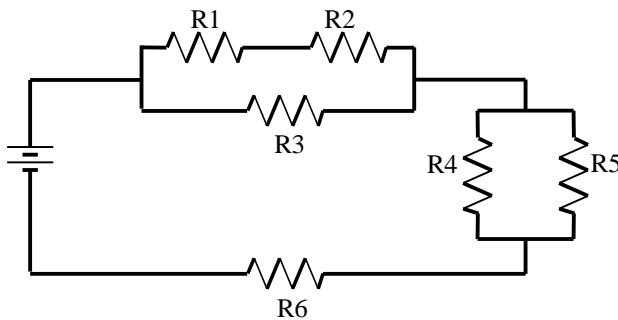
	V	I	R
Source	12V		
R ₁			2.0Ω
R ₂			4.0Ω
R ₃			6.0Ω

4. Complete the table by calculating the total resistance of the following parallel circuit. Then calculate total circuit current and the voltage drops and currents for each of the resistors.



	V	I	R
Source	12V		
R ₁			2.0Ω
R ₂			3.0Ω
R ₃			6.0Ω

5. Calculate the missing information in the table for the following series-parallel network.



	V	I	R
Source		2.0A	
R ₁			5.0Ω
R ₂	3.5V		
R ₃		1.5A	
R ₄	4.0V		
R ₅		1.0A	
R ₆			2.0Ω