

1. Describe/state the following terms/phrases:

[5 marks ]

(a) Kirchhoff Voltage Law :

(b) Kirchhoff Current Law:

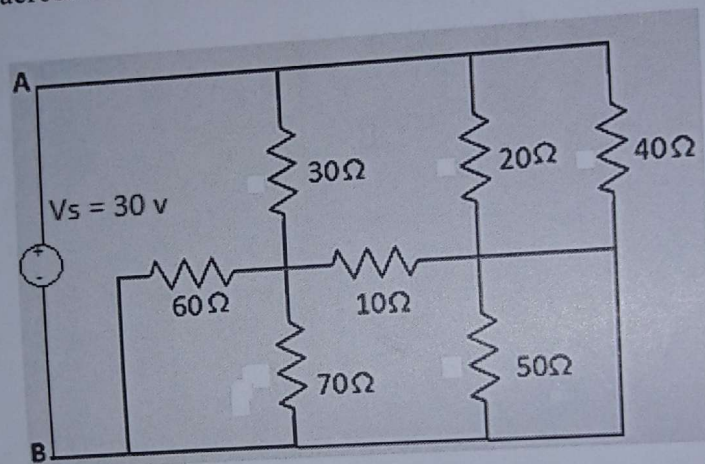
(c) Norton's Theorem:

(d) Thevenin's Theorem:

2. For the Resistive circuit shown below, determine the following

[6 marks]

- (a) The equivalent resistance across the terminal A-B
- (b) The total current delivered by the voltage source.
- (c) The current through the  $50\Omega$  resistor.
- (d) The voltage across the  $10\Omega$  resistor.





3. Apply both node and mesh analysis separately to determine all the branch voltages and branch currents in the circuit. [7 marks]

