

Sol 5

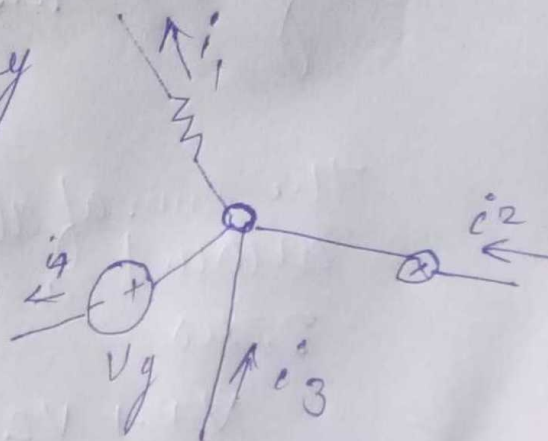
## Kirchhoff's current law (KCL)

This law is also called Kirchhoff's first law Kirchhoff's point rule or Kirchhoff junction rule (or nodal rule)

The principle of conservation of electric charge implies that At any node (junction) in an electrical circuit the sum of current flowing into that node is equal to the sum of current flowing out of that node or equivalently the algebraic sum of current in network of conductors meeting at a point is zero

The current entering any junction is equal to the current leaving that junction.

$$i_2 + i_3 = i_1 + i_4$$



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