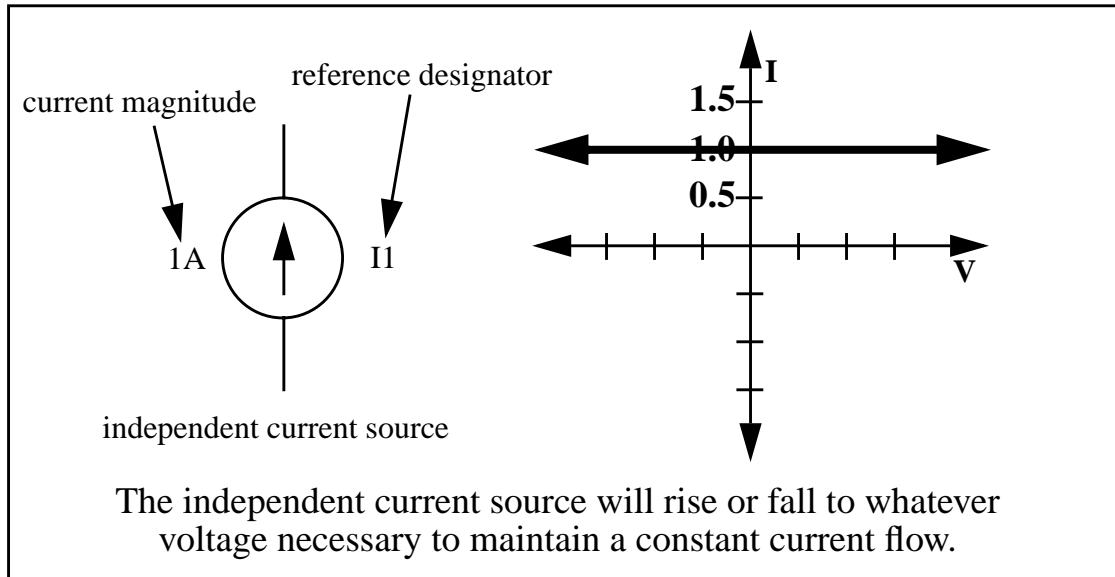


## Independent Current Sources

An independent current source is an energy source that pushes a constant flow of electrons through an electrical circuit regardless of the load presented to it. In other words, a 1 amp source will maintain a current flow of 1 amp through its terminals if it has an open circuit or short circuit as a load.

The symbol for the current source and its V-I curve is shown below. The current source symbol must be identified with at least its direction of current flow marked and a value or variable for its current.



Another way to think of a current source is of a constant speed motor driving a water pump. The constant speed motor will always deliver a constant volume of water per unit time through the pump. This is analogous to a constant flow of electrons per unit time.

