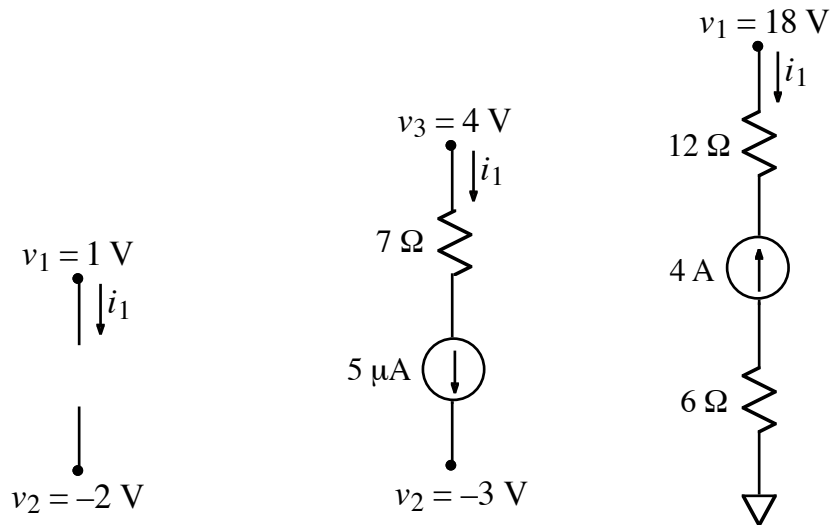


Ex:



Find the value of current,  $i_1$ , for each of the above circuits.

SOL'N: a) Since there is an open circuit, the current must be zero.

$$i_1 = 0\text{ A}$$

b) If there is a current source in a branch, (components in series), the current everywhere in that branch must be the same as the current source.

$$i_1 = 5\ \mu\text{A}$$

c) The current must match the current source, but the polarity is inverted since the arrow in the current source is in the opposite direction of  $i_1$ .

$$i_1 = -4\text{ A}$$