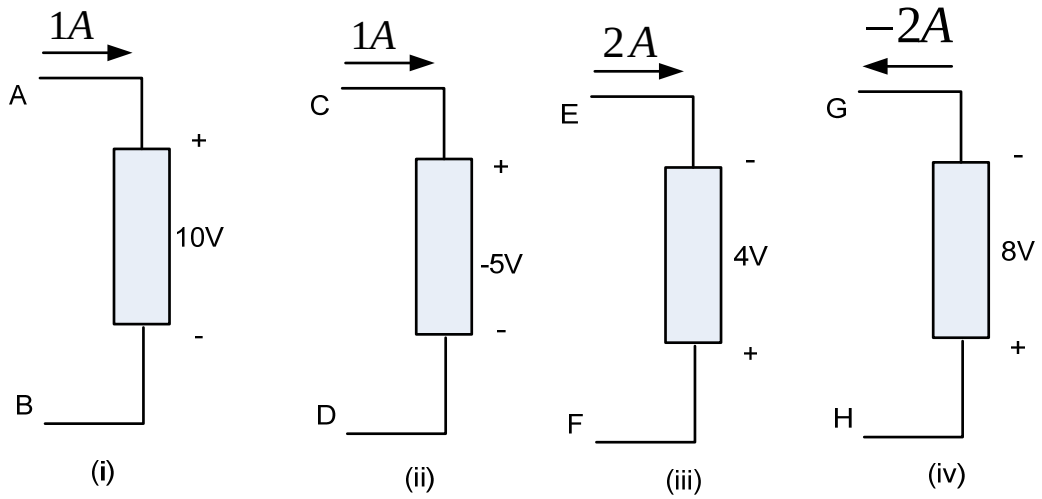
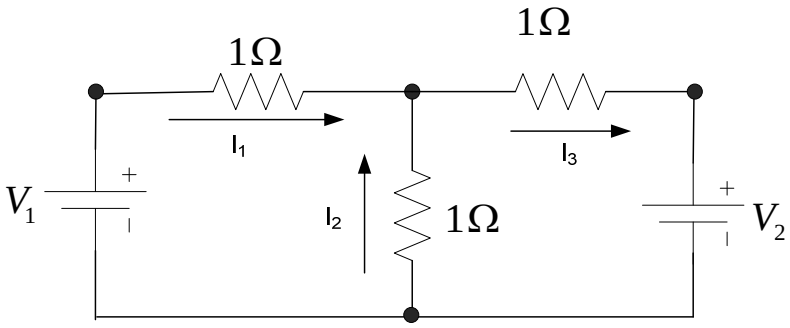
Extra Practice Questions

1) For the elements given below:



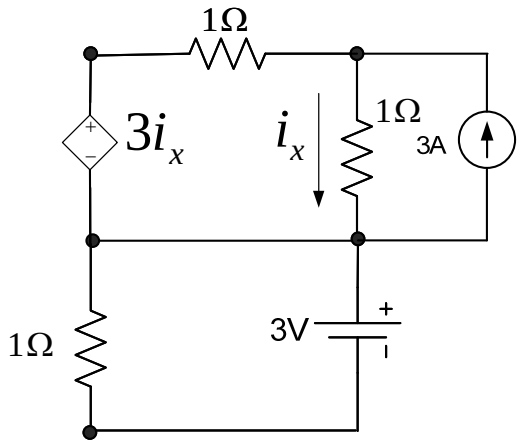
a) State for which elements is Passive sign convention followed?
b) Find the power associated with the each element.
c) Which elements are passive?
d) For each element, name the terminal that is at a higher voltage.

2) For the figure,



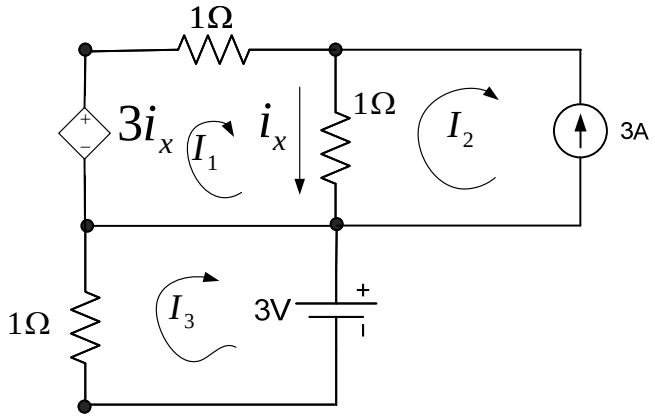
a) Are the current directions for I2 and I3 correct?
b) Can we conclude if the voltage source V2 is taking power or giving power before solving the circuit?
c) If I1=-3A, I2=4A, find I3.
d) If V1=10V, find V2.

3) In the circuit given,



Use node voltage analysis to solve the circuit. Find the value of current i_x .

4) In the circuit given,

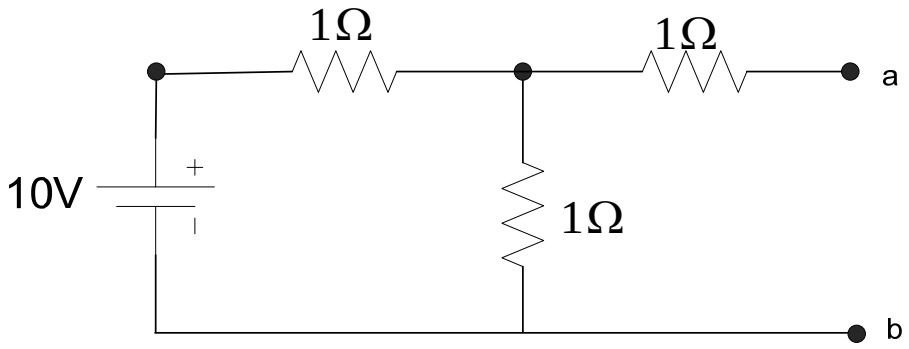


a) Find the values of I1, I2 an I3.

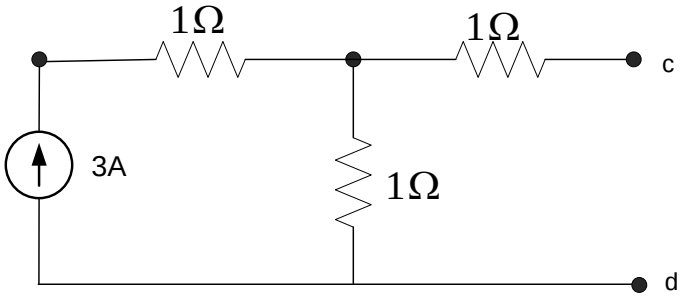
b) Find the value of i_x .

c) What is the power associate with the current source?

5) In the circuit given, Find the Thevenin equivalent between terminals a and b.



6) Find the Norton equivalent of the circuit between points c and d.



7) Find the Thevein equivalent of the circuit between terminals e and f.