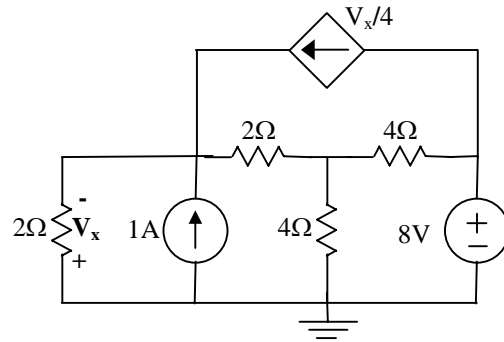
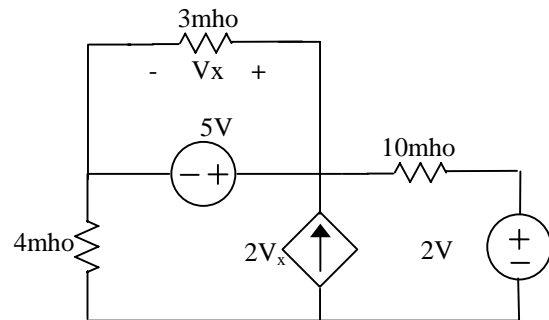


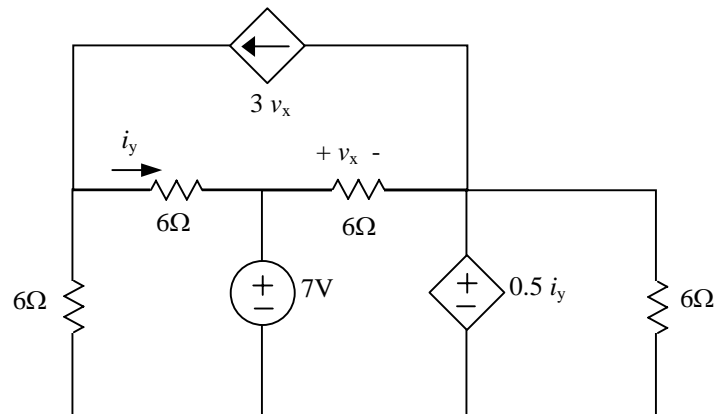
1- Find the power supplied by the voltage source by using mesh analysis



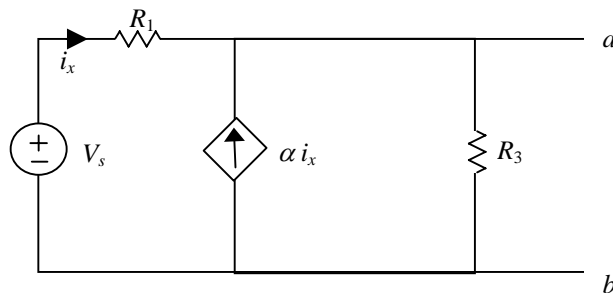
2- Find the power supplied by the dependent source by using node analysis



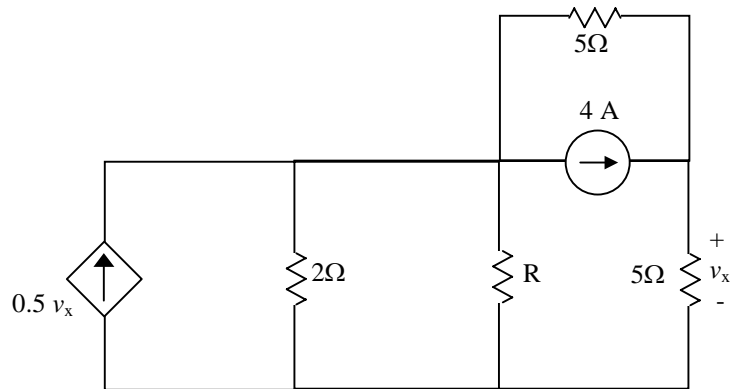
3- Find the power of the dependent voltage source. State whether it is being delivered to or extracted from the circuit. Use node or mesh analysis. State your reasoning for the analysis method you preferred.



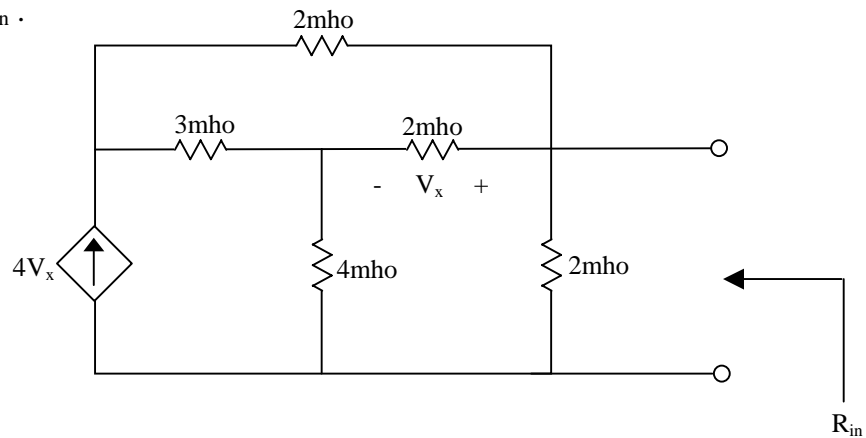
4- Find the Thevenin and Norton equivalent circuits.



- 5- a) Find the Thevenin equivalent circuit seen by the resistance R .
 b) Find the resistance R so that its power is maximized.



- 6- Find R_{in} .



- 7- Find the voltage v_s and the power of the independent current source by using superposition principle.

