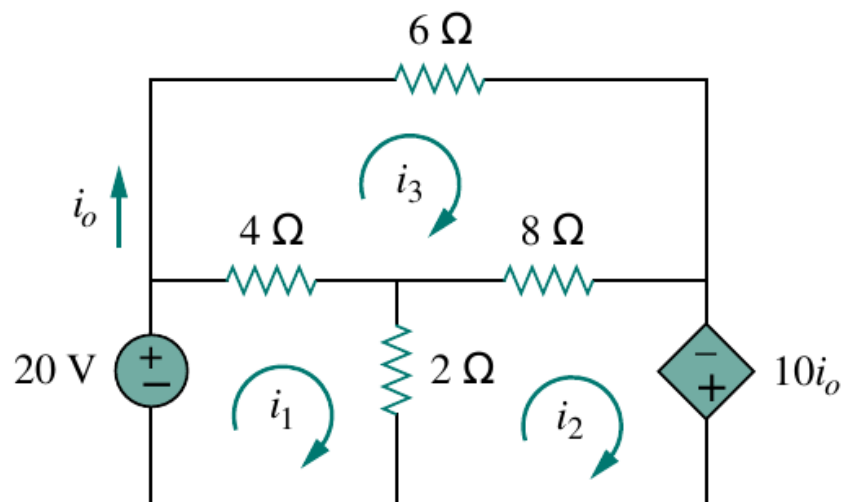
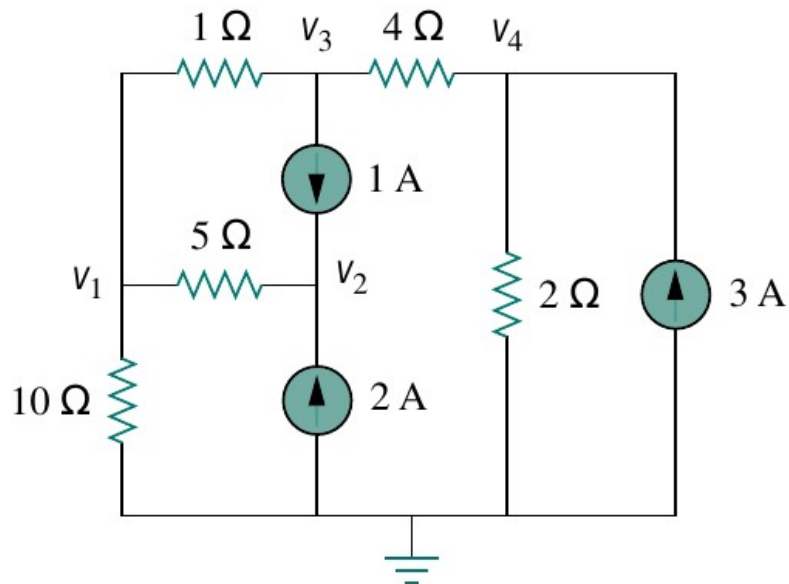


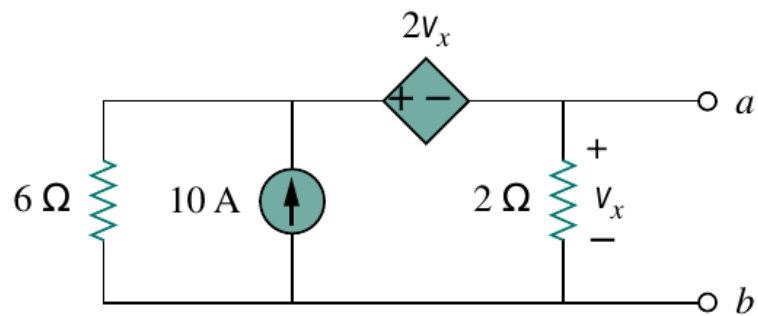
1 - Using mesh analysis, find  $i_o$  in the given circuit (write all mesh equations to obtain full point)



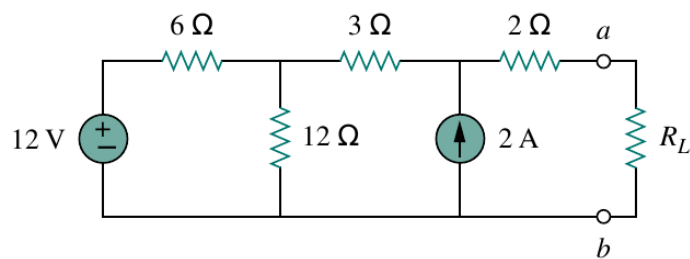
2 - Obtain the node voltage equations, in matrix form, for the circuit given below



3 – Find the Norton equivalent circuit for the circuit given below



4 - For the circuit given below find the value of  $R_L$  for maximum power transfer, also calculate the maximum power transferred



5 – Find  $v(t)$  for  $t > 0$  in the given circuit. Assume the switch has been open for a long time and is closed at  $t = 0$ . Calculate  $v(t)$  at  $t = 0.5$  sec.

