

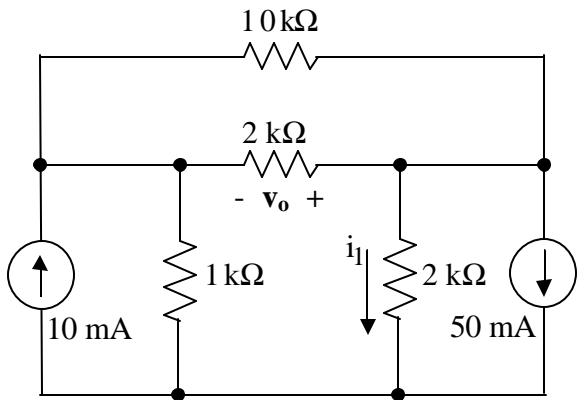
UNIVERSITY OF UTAH
ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT

ECE 1270

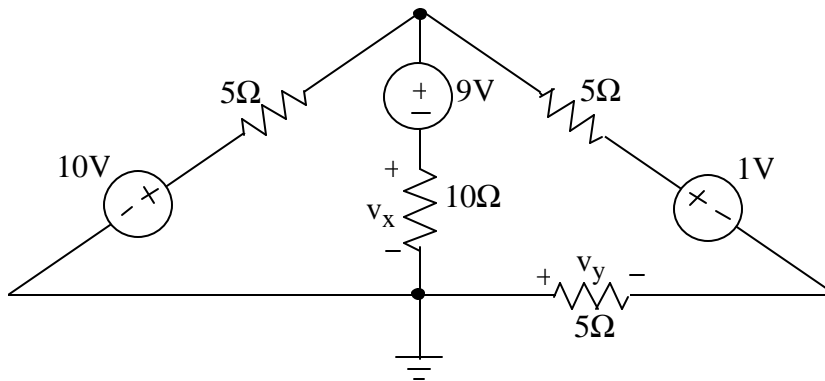
HOMework #3

Spring 2008

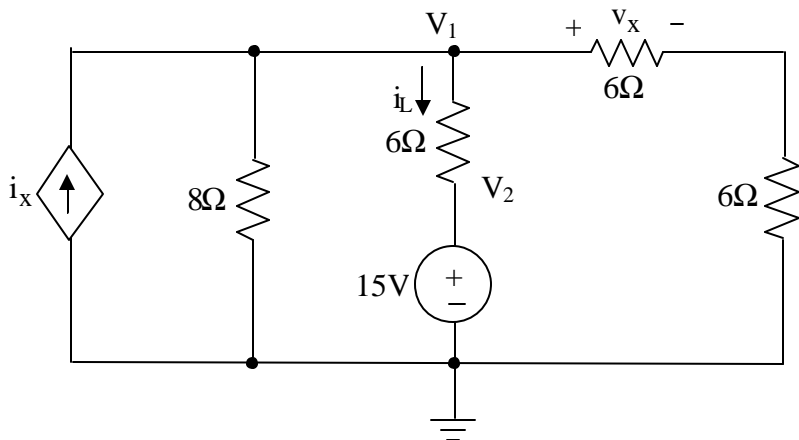
1. Use node-voltage method to find i_1 and v_o .



2. a. Use the node-voltage method to find V_x and V_y .
b. Calculate the power dissipated by the 10Ω resistor.



3. Use the node voltage to find V_1 . Then find i_L . Use $i_x = \frac{V_x}{3}$



4. a. Use the mesh-current method to find i_1 and i_2 . Use $V_x = 0.5i_2$.
b. Find the power dissipated by the dependent current source.

