EECE202   **NETWORK ANALYSIS I**   **Dr. Charles J. Kim**
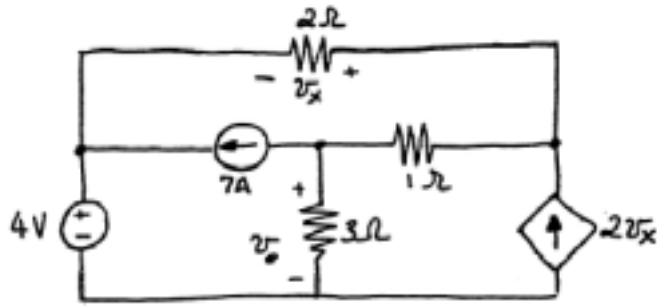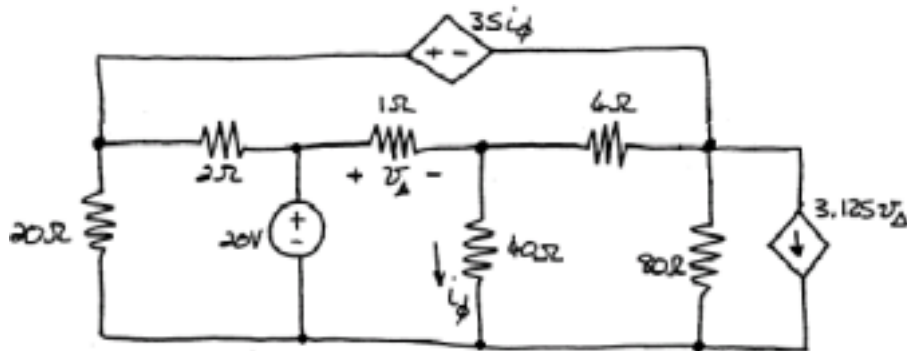
HOMEWORK #2 – Part 1 of 2
Solve the following problems using **any** or **combination** of the analysis techniques you learned:
Nodal Analysis (i.e., KCL),Mesh Analysis (i.e., KVL),
Thevenin Equivalent Circuit and Maximum Power Transfer, and
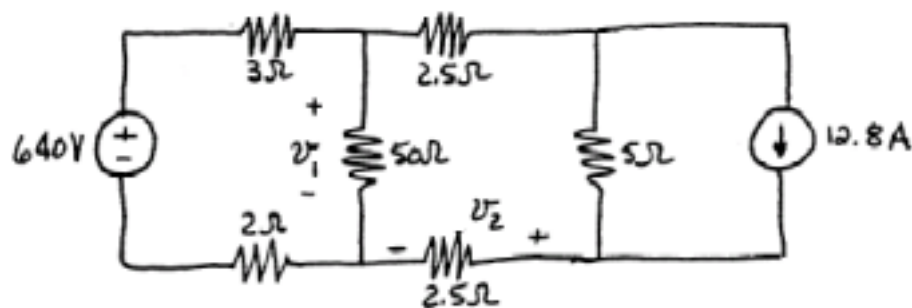Source Transformation,

SHOW YOUR WORK

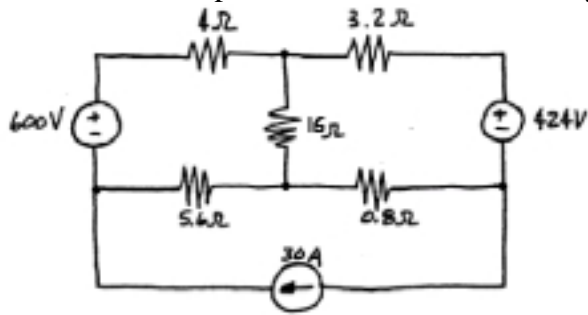1. Find v_o in the circuit below.

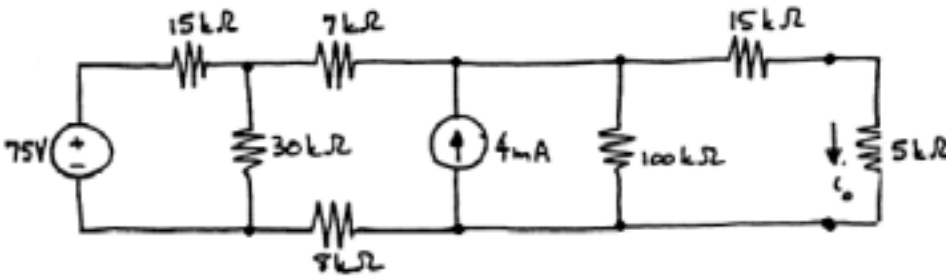2. Calculate the power delivered by the 20 V source.
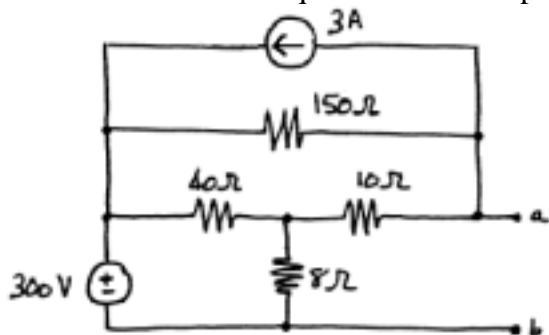

3. Find v_1 and v_2.

4. Calculate the power delivered/consumed by the 30 A source.

5. Find the current through the 5 kΩ resistor in the circuit.

6. Find the Thevenin equivalent with respect to the terminals a and b for the circuit below.

7. Find the value the resistor R that can deliver the maximum power to the resistor.