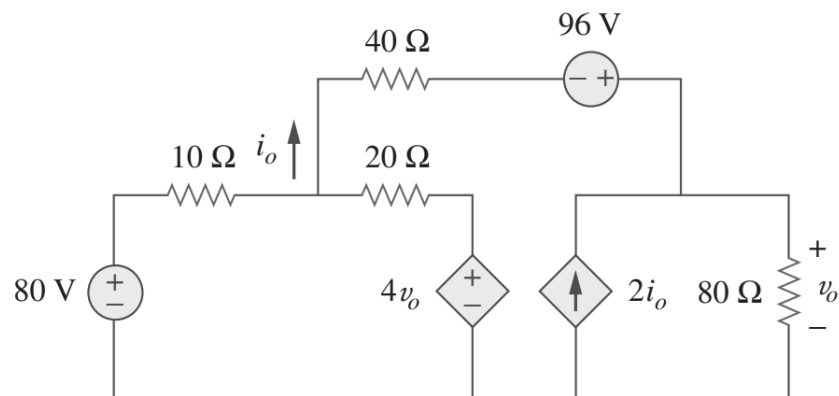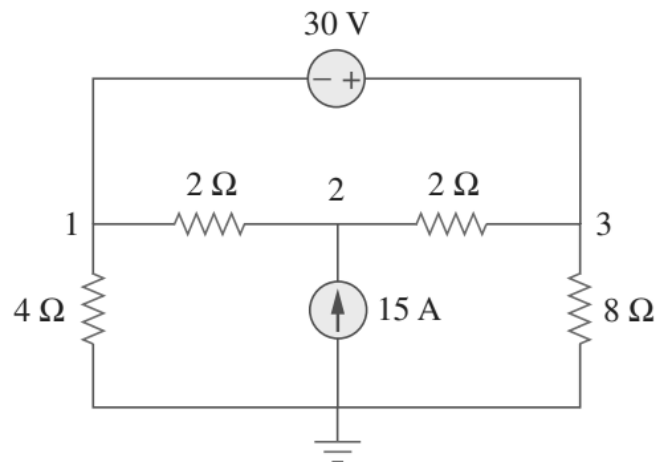# ENGR 065: Circuit Theory

Problem Set #5

Read Chapter 3 from [1] and then solve the following problems.

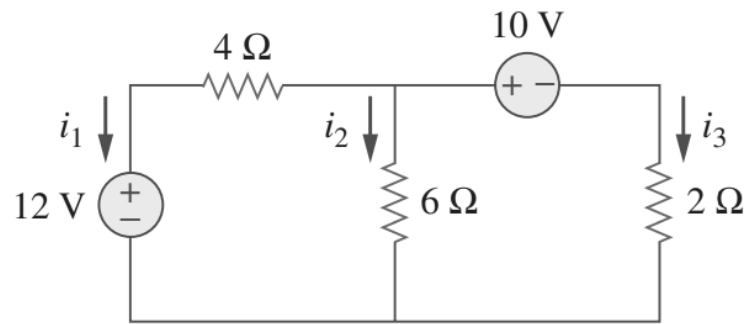**Problem 1** [25%]: Compute v_o using node-voltage method.

(Hint: test your solution by checking that $i_o = -4.48A$)

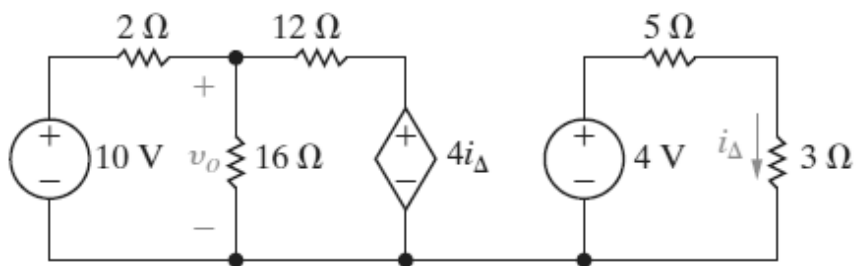**Problem 2** [25%] Determine node voltages in the following circuit.

Problem 3 [25.5%] Use the mesh-current method to find i_1, i_2 and i_3 in the following circuit.

Problem 4 [25.5%]

a) Use the mesh-current method to find v_o in the following circuit.

b) Compute the power delivered by the dependent source.

References

[1] C. Alexander and M. Sadiku "Fundamentals of Electric Circuits", 7th Edition, 2021, McGraw-Hill