## Homework 4 EE 220 Circuits I Fall 2019 Monday, September 30, 2019

- 1) PP4.1 Use regular circuit analysis to find  $v_o$  for  $i_S = 30$  A. Then, use linearity to determine  $v_o$  when  $i_S = 45$  A.
- 2) PP4.5 Also, list contributions to *I* by each independent source.
- 3) 4.17 Also, list contributions to  $v_x$  by each independent source.
- 4) 4.22 Reduce circuit down to a 4  $\Omega$  resistor and an independent voltage source plus series resistor.
- 5) 4.44b Also, sketch the Thevenin equivalent circuit.
- 6) 4.47 Also, sketch the Thevenin and Norton equivalent circuits.
- 7) 4.51a Also, sketch the Norton equivalent circuit.
- 8) 4.69 Also, find and sketch the Thevenin and Norton equivalent circuit 'seen' by R.

Due Friday, October 4, 2019.