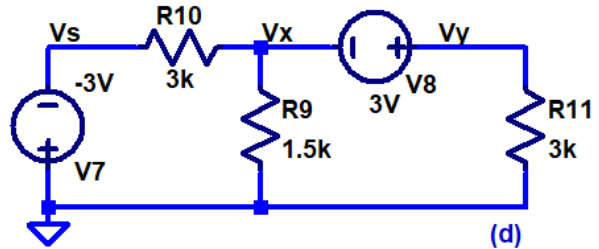
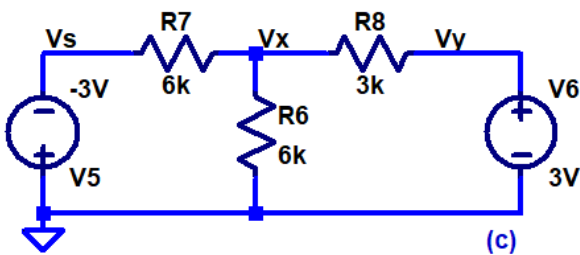
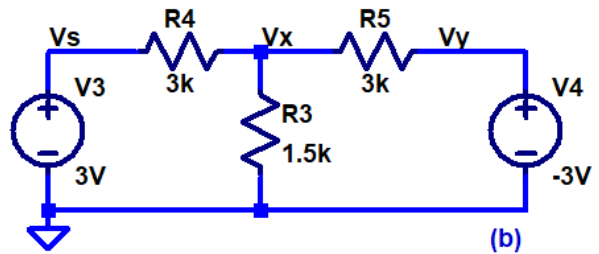
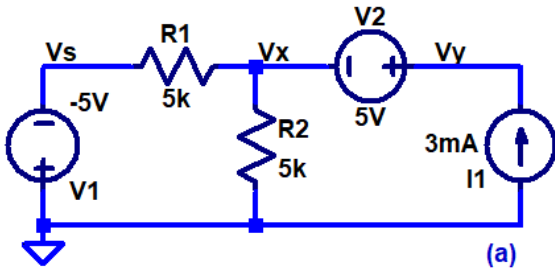


H.W. #6 EE 220 Fall 2023

Show your work for credit!

1. Find the voltages and currents in each of the following circuits **using mesh analysis**. Verify your hand calculations using LTspice. (8 points)



2. Repeat problem 1, but no need to repeat the LTspice simulations, **using superposition**. (8 points)
3. Find the Thevenin and Norton equivalent circuits for the circuitry to the left of the two terminals marked with red dots below. Show that your Thevenin and Norton equivalent circuits result in the same voltages across  $R_3$  and  $R_6$  as the original circuits. Verify your answers with 6 LTspice simulations (2 sims for the original circuits, 2 sims with each Thevenin circuit connected to  $R_3$  and  $R_6$ , and 2 sims with each Norton equivalent circuit connected to  $R_3$  and  $R_6$ ). (6 points)

