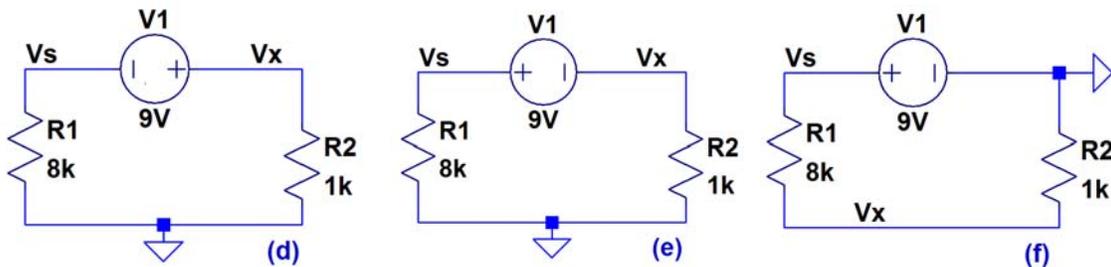
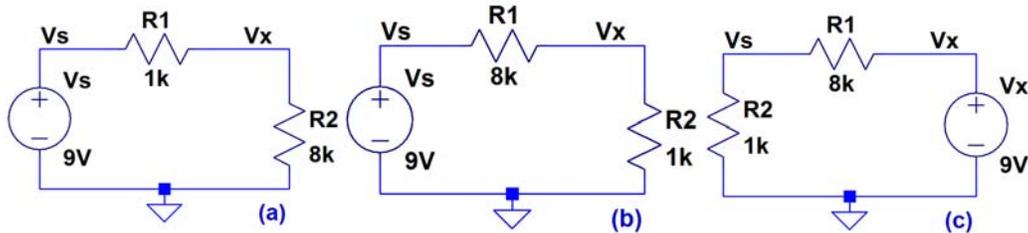
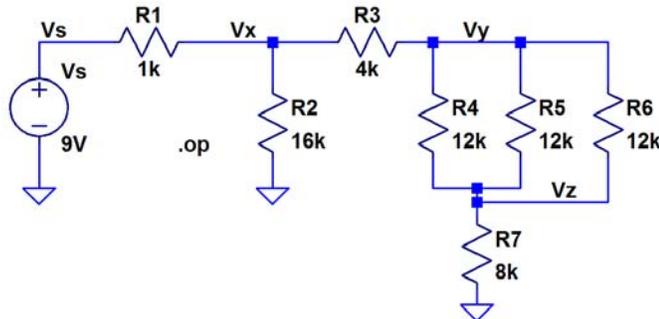


Show your work for credit!

- Find the voltages  $V_x$  and  $V_s$  in each of the following circuits. Verify your hand calculations using LTspice. (6 points)



- Find the voltages in the following circuit. Verify your hand calculations using LTspice. (6 points)



- Show how to derive the voltage divider equation and the current divider equation for a two resistor circuit. Ensure your derivation includes the two schematics you are using. Provide an example for each derivation. (4 points)
- Calculate  $V_s$ ,  $V_x$ , and the current that flows in  $R_2$  and  $R_3$ . Verify your hand calculations using LTspice. (4 points)

