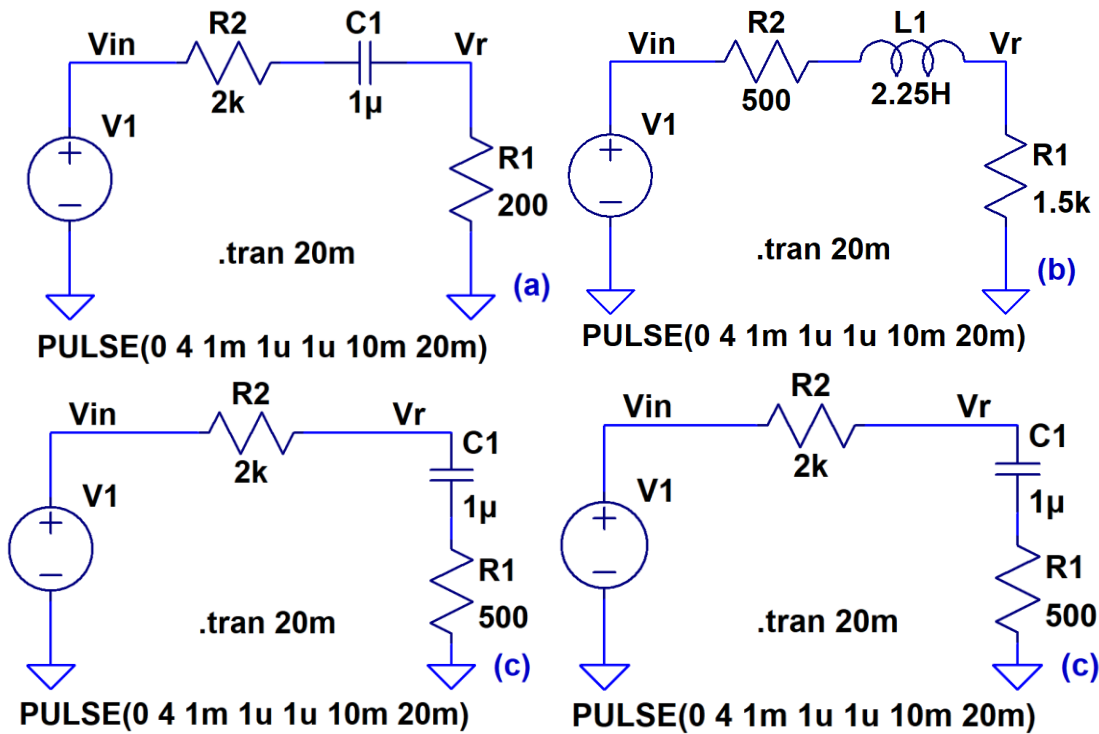
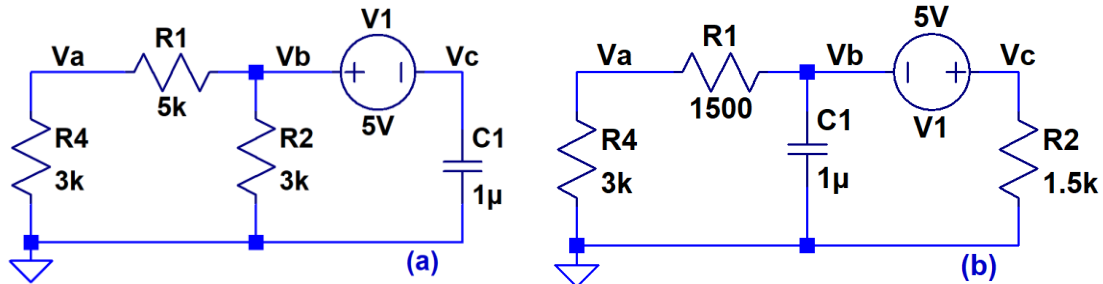


Show your work for credit!

- How much power do a capacitor and inductor dissipate? Assume the capacitor/inductor have no parasitic resistance (no resistor in series with them), that is, they are ideal. If a voltage and current are delivered to the capacitor and inductor what is done with the energy they receive? Do the inductor or capacitor heat up when receiving energy? Why or why not? (4 points)
- Write equations for  $V_r$  in the following circuits. Verify your answers with LTSpice. (8 points)



- Find all voltages in the following circuits. Verify your answers using LTSpice. (2 points)



- Re-work problem 4 in HW #11 if the DC source is connected to the non-inverting (the “+” input) terminal of the op-amp and the left side of  $R_1$  is grounded. (2 points)