EECS 16A Designing Information Devices and Systems I
Fall 2020 Discussion 8B

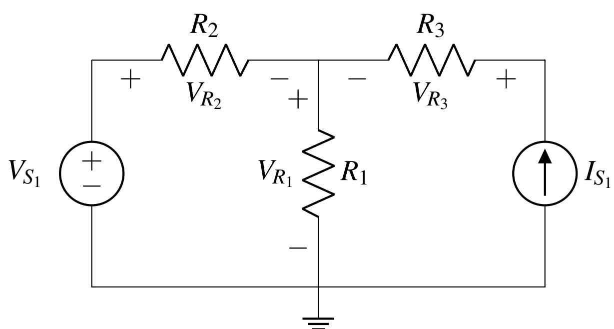
1. **Superposition**

For the following circuits:

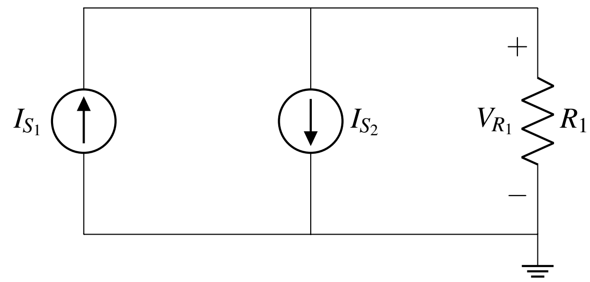
i. Use the superposition theorem to solve for the voltages across the resistors.

ii. For parts (b) and (c) only, find the power dissipated/generated by all components. Is power conserved?

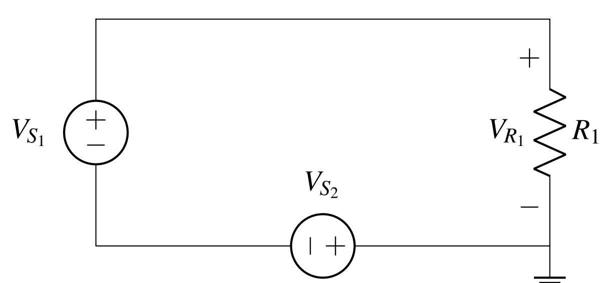
(a)



(b)

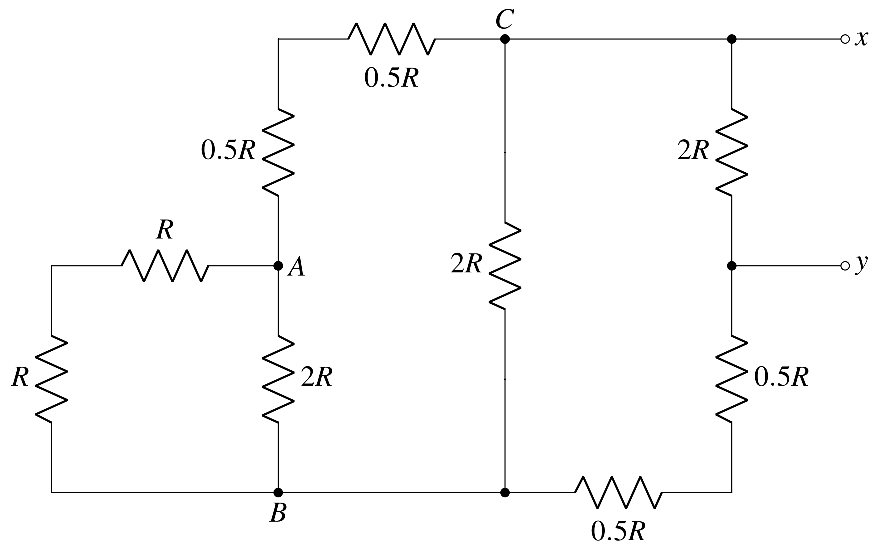


(c)



2. (Practice) Series and Parallel Combinations

For the resistor network shown below, find an equivalent resistance between the terminals x and y using the resistor combination rules for series and parallel resistors.



3. (Practice) Passive Sign Convention and Power v 2.0

Suppose we have the following circuit and label the currents as shown below. Calculate the power dissipated or supplied by every element in the circuit. Let $V_s = 5\,\text{V}, I_s = 0.5\,\text{A}$ and $R_1 = 5\,\Omega$.