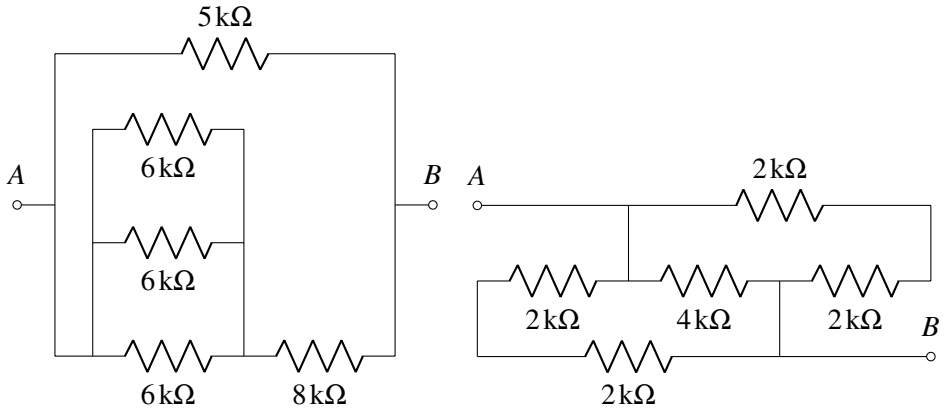
EECS 16A Designing Information Devices and Systems I
Spring 2017 Babak Ayazifar, Vladimir Stojanovic Discussion 6A

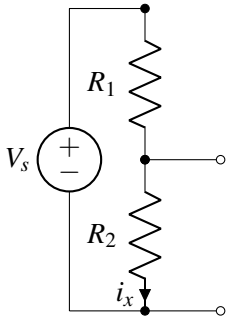
1. Series and Parallel Combinations

For the resistor networks shown below, find an equivalent resistance between the terminals A and B using the resistor combination rules for series and parallel resistors.

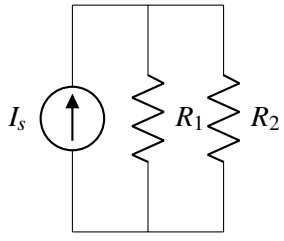


2. Voltage and Current Dividers

(a) For the circuit below, find the voltage V_{out} in terms of the resistances R_1 R_2 and V_s.

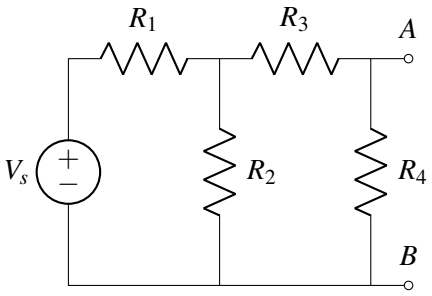


(b) For the circuit below, find the current through R_2.



3. KVL and KCL

For the circuit shown below, $V_s = 5V$, $R_1 = R_2 = 4k\Omega$ and $R_3 = R_4 = 2k\Omega$.



(a) For the circuit above write KVL equations for each loop and KVL equations for each node.

(b) Solve for the voltage between A and B using resistor combination rules and divider rules.