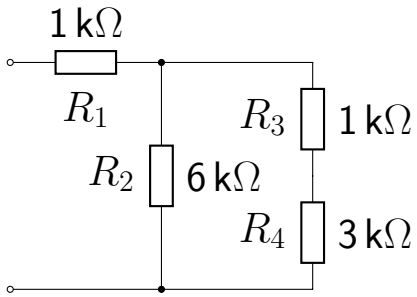
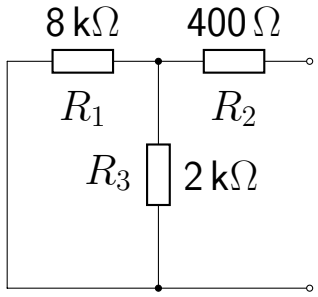
Seminars - 2nd week

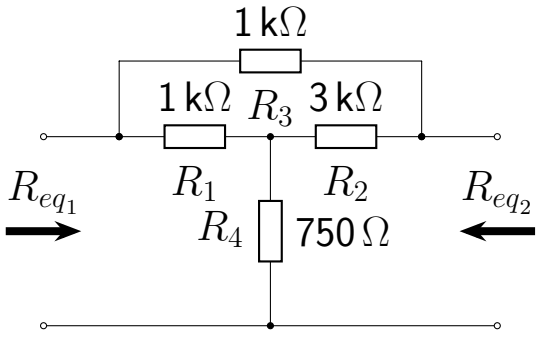
1. For the circuit in the figure below find total equivalent resistance R_{eq}.



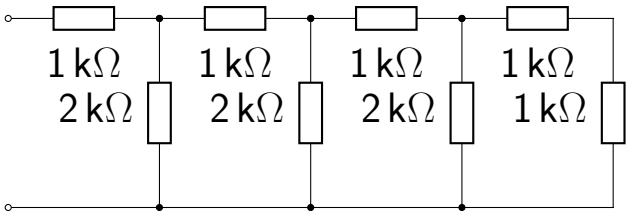
2. For the circuit in the figure below find total equivalent resistance R_{eq}.



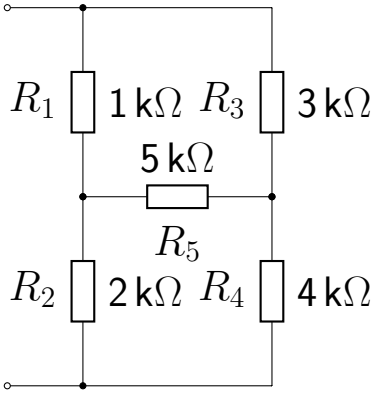
3. For the circuit in the figure below find total equivalent resistance R_{eq_1} for the left-handed pair of terminals, and R_{eq_2} for the right-handed pair of terminals.



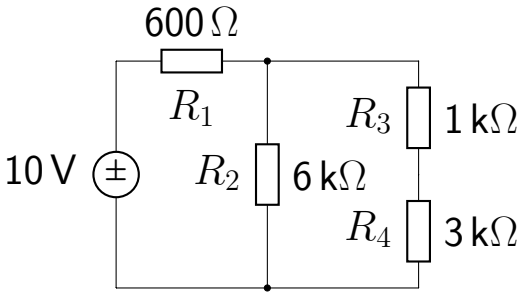
4. For the circuit in the figure below find total equivalent resistance R_{eq}.



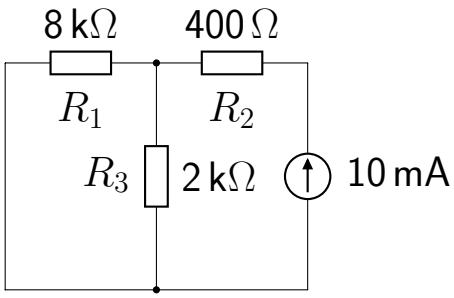
5. For the circuit in the figure below find total equivalent resistance R_{eq}.



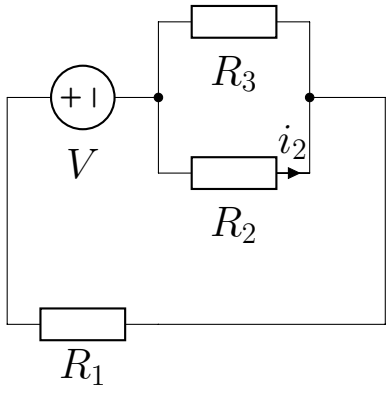
6. In the circuit in the figure below calculate all device voltages.



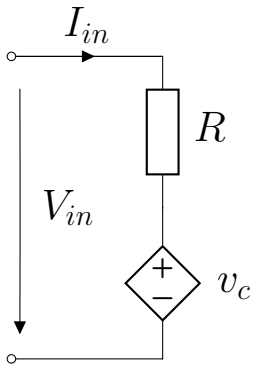
7. In the circuit in the figure below calculate all device voltages and currents.



8. In the circuit in the figure below calculate current i_2, if V = 11 V, R_1 = 1 Ω, R_2 = 2 Ω, R_3 = 3 Ω.



9. For the circuit in the figure below find relationship between input voltage and input current (the input resistance of the circuit R_{in}). $v_c = AV_{in}$



10. In the circuit in the figure below are two batteries, represented by voltage sources V_1 = 1.5 V and V_2 = 1.2 V and resistors R_1 = 0.2 Ω and R_2 = 0.3 Ω connected in parallel. Find total voltage V_t.