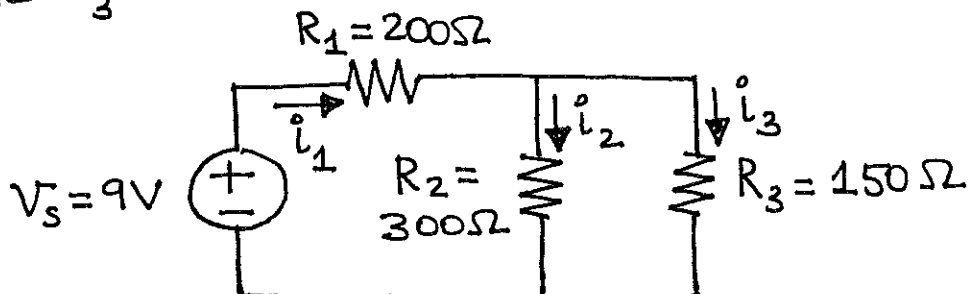
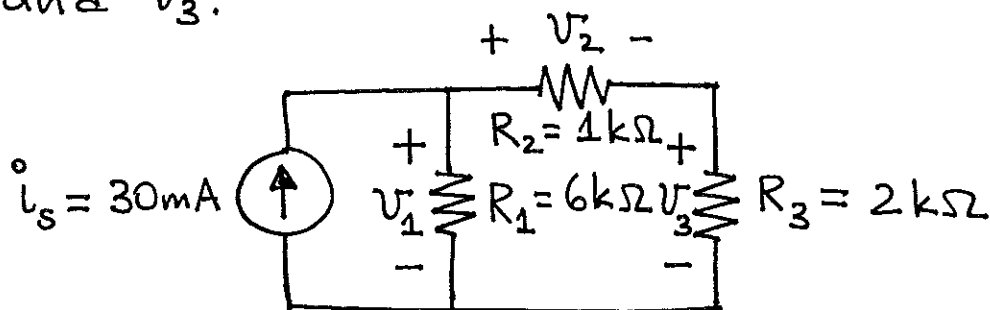


HOMEWORK #2

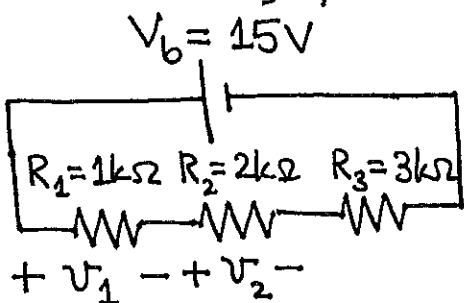
- (1) For the circuit shown, find the currents i_1 , i_2 and i_3 . Provide units and box each answer.



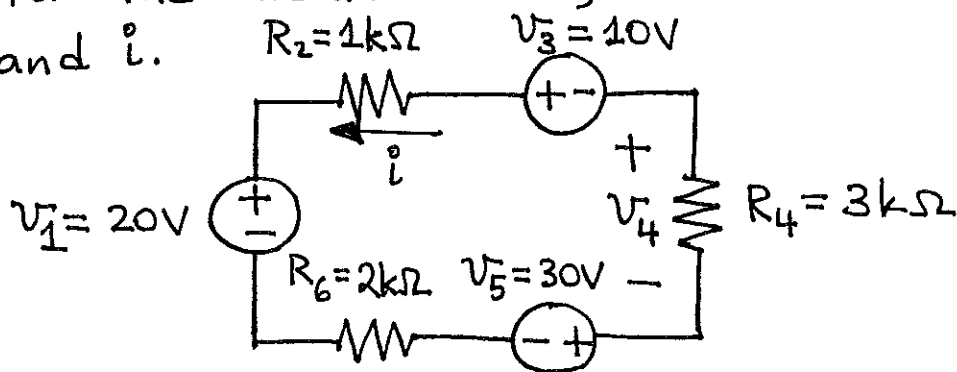
- (2) In the circuit shown, find the voltages v_1 , v_2 and v_3 .



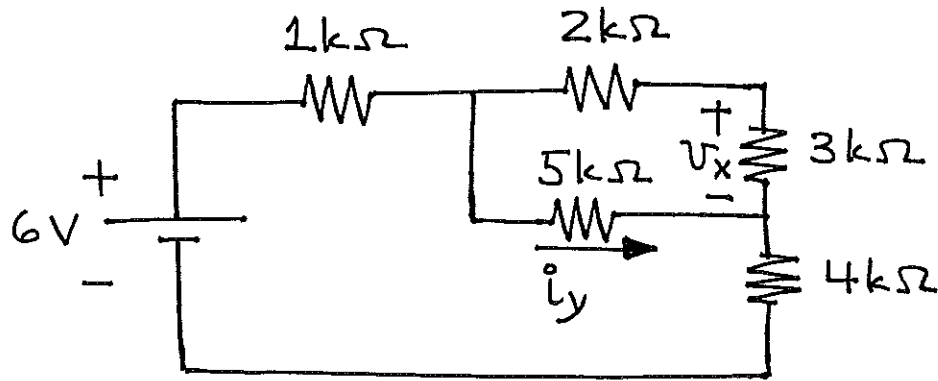
- (3) For the circuit shown, find the voltages v_1 and v_2 .



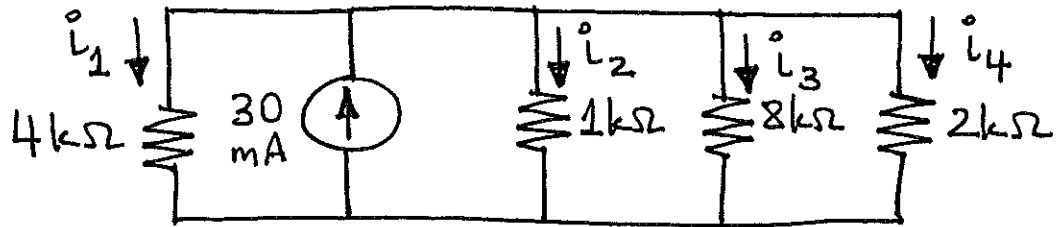
- (4) For the circuit shown, determine the values of v_4 and i .



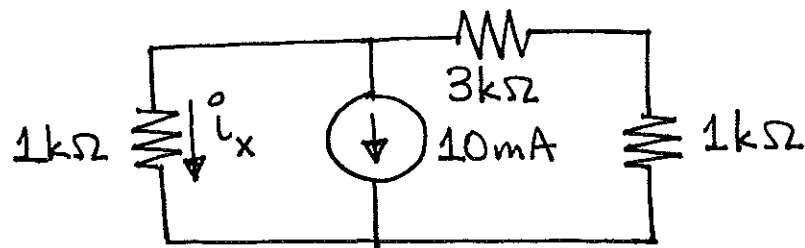
(5) For the circuit shown, find v_x and i_y .



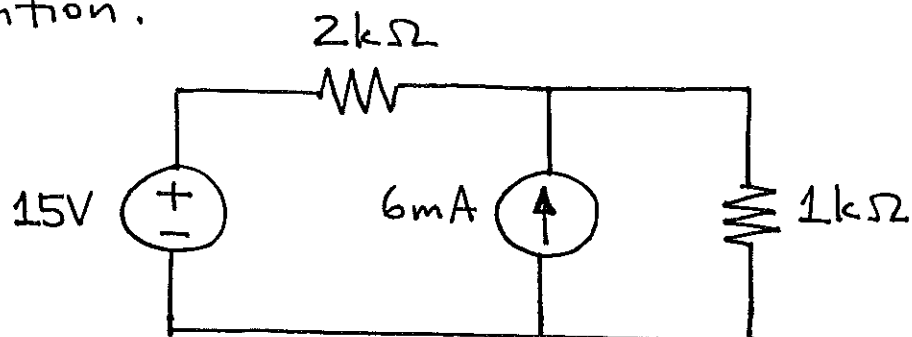
(6) For the circuit shown, find the currents i_1 , i_2 , i_3 and i_4 .



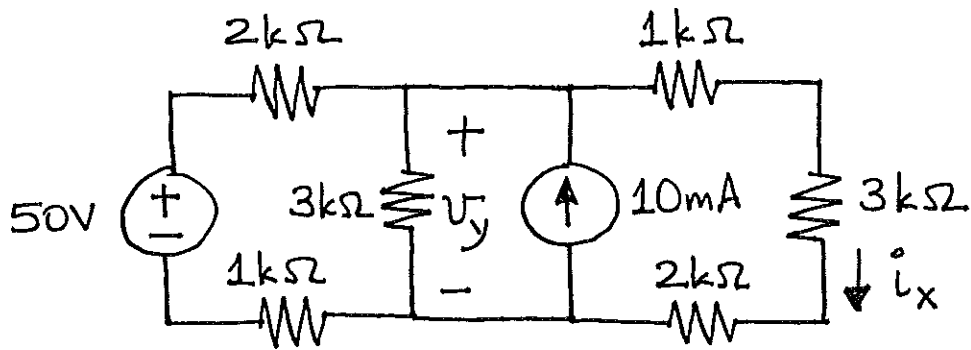
(7) For the circuit shown, find i_x .



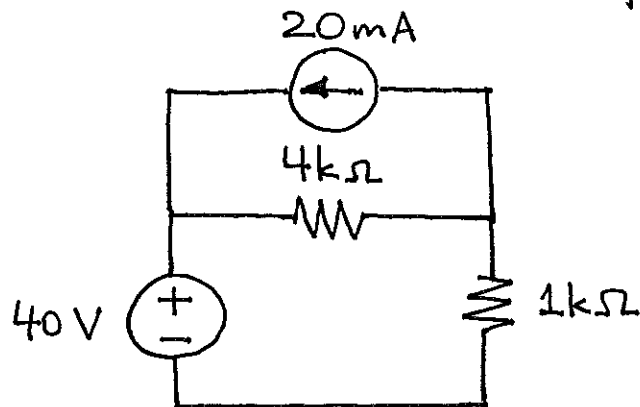
(8) For the circuit shown, find the power of each source and provide your answers based on passive convention.



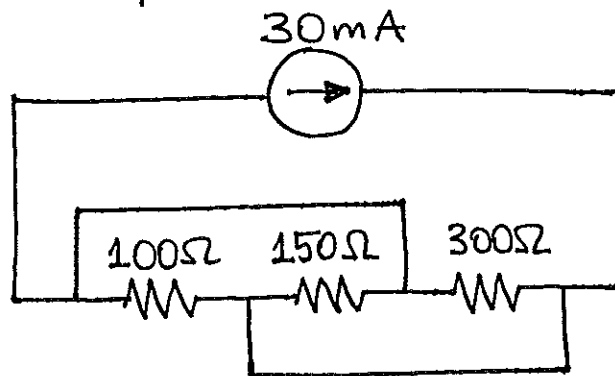
(9) For the circuit shown, find the values of i_x and v_y .



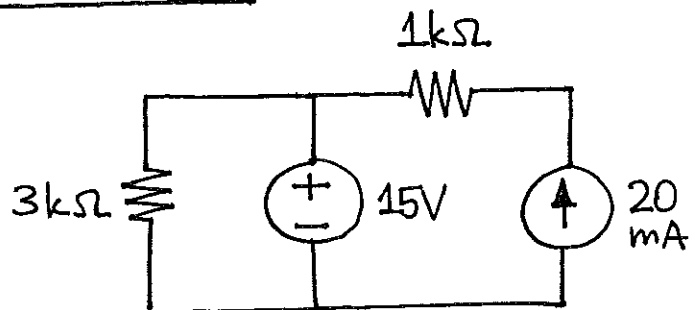
(10) For the circuit shown, find the power of each element. Also, verify conservation of energy principle.



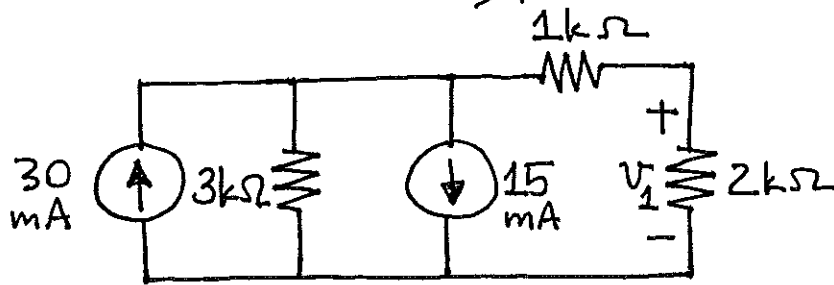
(11) For the circuit shown, find the value and direction of the current of each resistor.



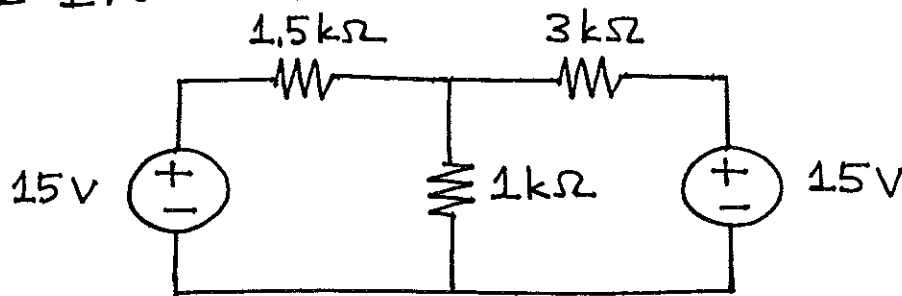
(12) For the circuit shown, find the power of each element and verify conservation of energy principle.



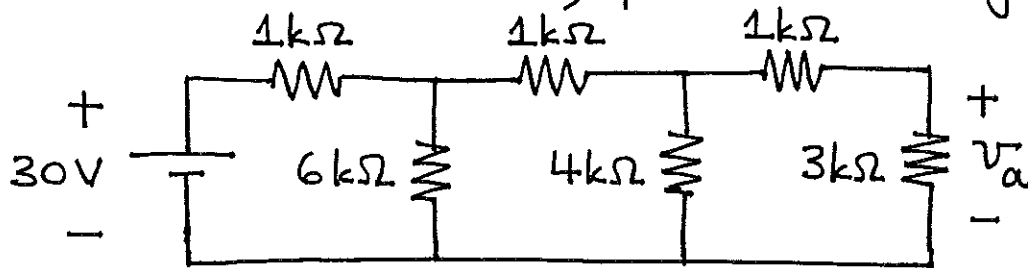
(13) In the circuit shown, find the value of voltage v_1 .



(14) For the circuit shown, find the current through the $1\text{ k}\Omega$ resistor.



(15) In the circuit shown, find the voltage v_a .



(16) For the circuit shown, find the current through each resistor including their directions.

