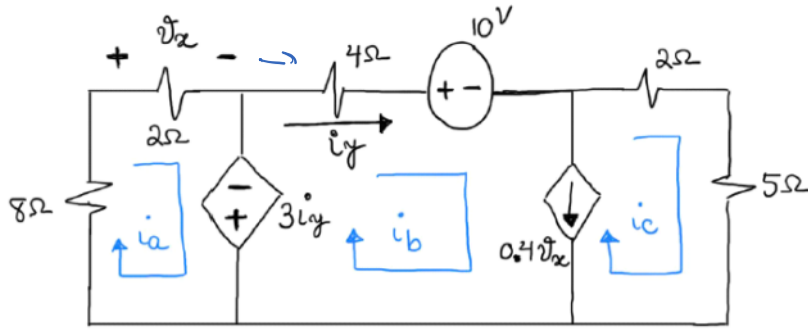


Exercise 5, Q1

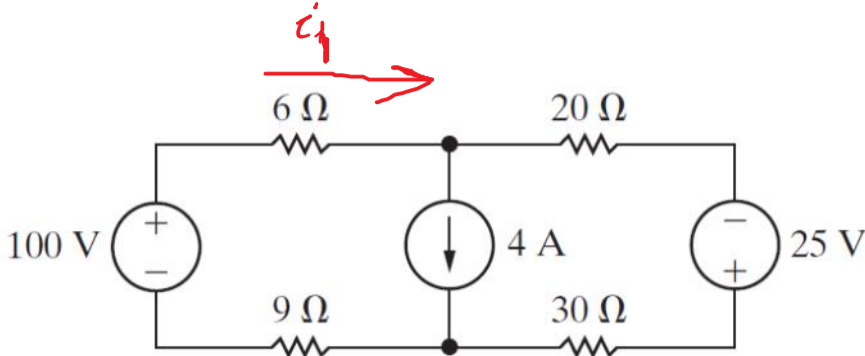


Use mesh current analysis method to formulate the set of equations to solve for three mesh currents i_a, i_b, i_c . Rewrite the equations in a matrix form (do not solve the matrix equations).

Write the equation for the power associated with the dependent voltage source in terms of the mesh currents i_a, i_b .

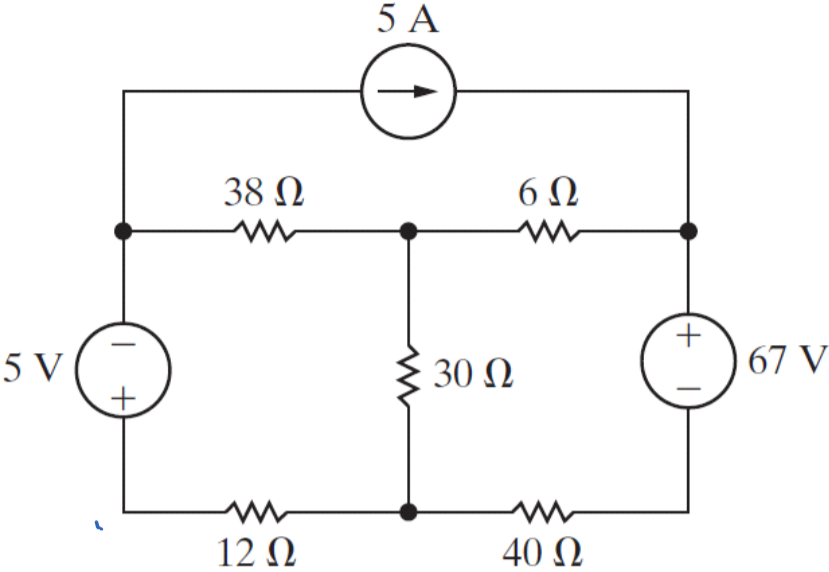
Exercise 5, Q2

Use Mesh-Current Method to find the current i_1 and power associated with the 25V source.



Exercise 5, Q3

Find mesh currents.



Exercise 5, Q4

Use Mesh-Current Analysis to find branch currents i_a - i_e .

Figure P4.53

