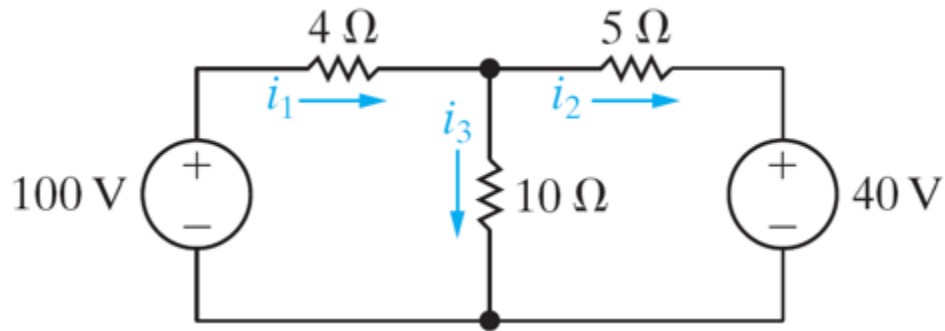


Question 1 [10]

Consider the following circuit below.



- (i) Calculate the values of i_1 , i_2 , and i_3 using a KCL at the top essential node, and two KVL equations for the left and right hand loops.
- (ii) Directly on the figure, label the two mesh currents i_a and i_b and their directions.
- (iii) Now, write down the values of the two mesh currents (by relating them to the three currents from (i)).