

Tutorial-1

Winter_2025

Basic Electronics (ECE113)

Q1: Find potential difference between node A & B (V_{AB}) in Figure-1.

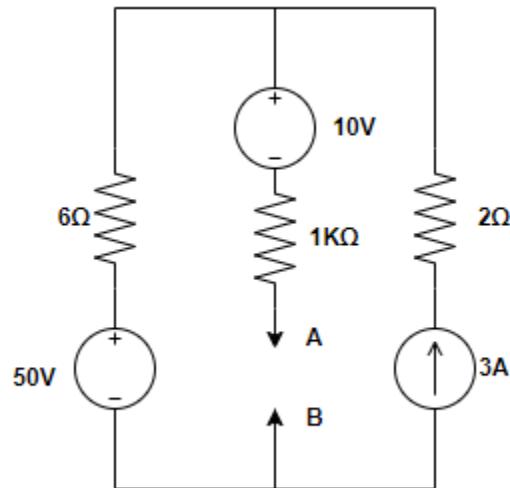


Figure 1

Q2: Calculate power for each and every elements in the network (in Figure-2), when $V_0 = 125$ volts. Prove that network satisfies the “Conservation of Energy”.

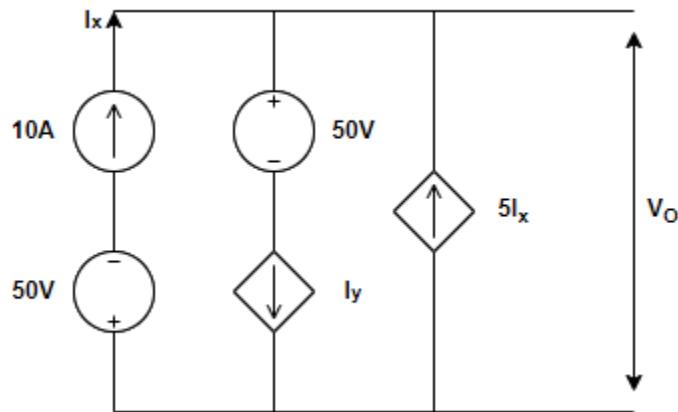


Figure 2

Q3: Determine total number of nodes, loops, branches, meshes and power absorbed by each resistance of the given following circuit (in Figure-3):

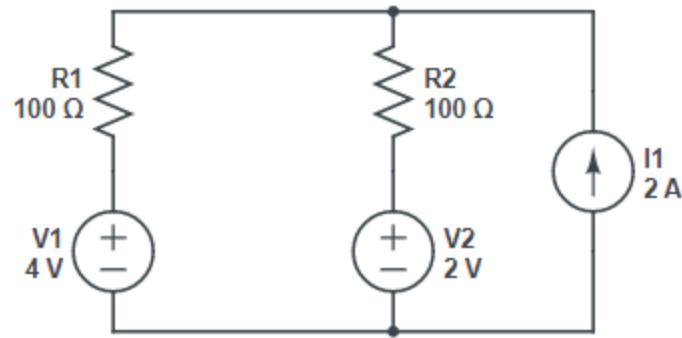


Figure 3

Q4: Find the current “ I_1 ” of the given following circuit (in Figure-4).

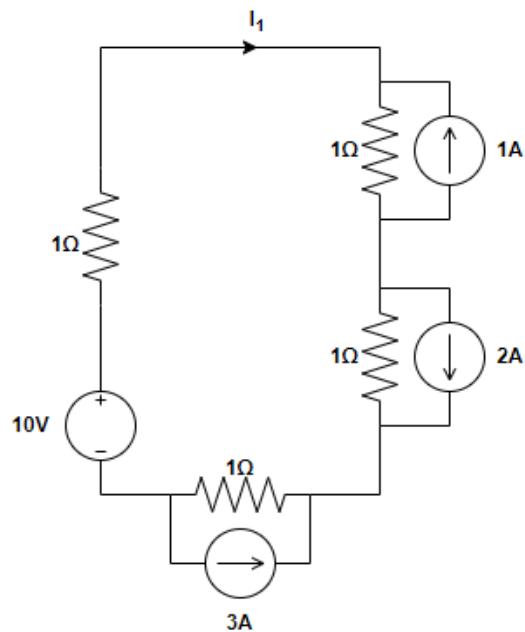


Figure 4

Q5: Find equivalent resistance with respect to node A & B (in Figure-5).

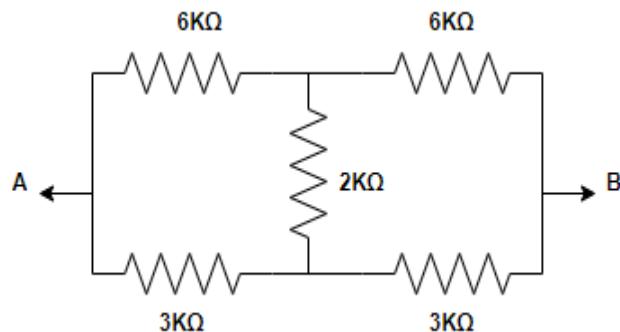


Figure 5

Q6: Find the value of current "I" (in Figure-6).

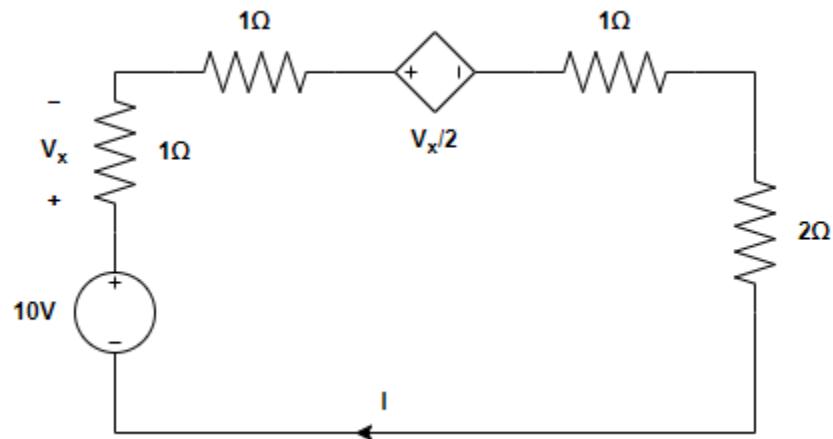


Figure 6