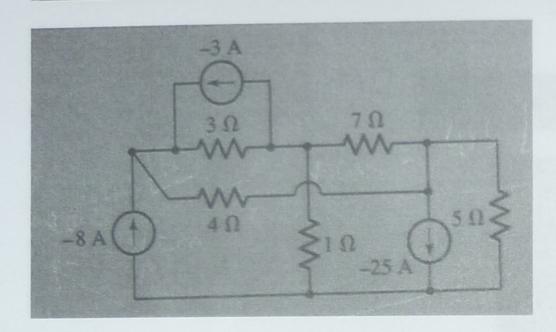
St Clements University Higher Education School-Niue Highlight Computer Group IQY Technical College BAE 405 Advanced Circuit Analysis

Answer all Questions Total 100 marks & Each 10 Marks

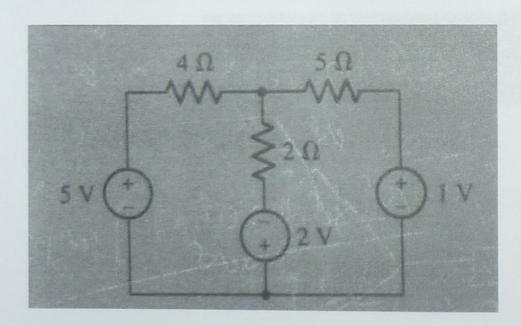
Q1

Determine the nodal voltages for the circuit



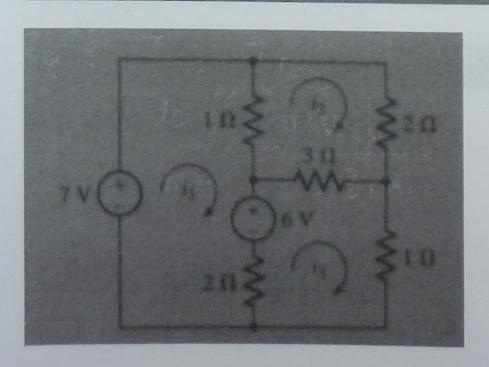
Q2

Determine the power supplied by the 2 4 source

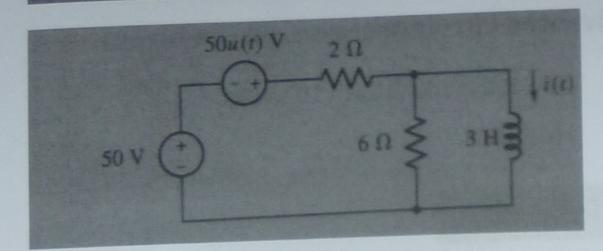


Q3

Use mesh analysis to determine the three mesh currents

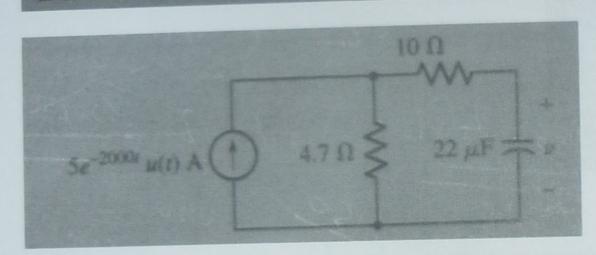


Determine i(t) for all values of time in the circuit



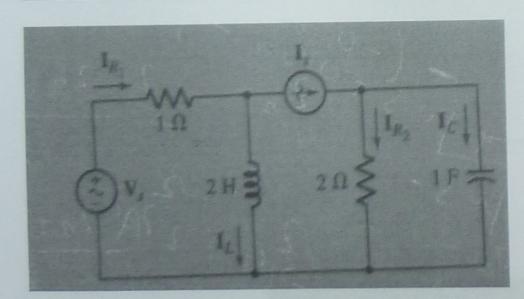
Q5

Determine an expression for v(t) in the circuit



Q6

For the RLC circuit of Fig. 10.17, determine i, and i,(t) if both sources operate at $\omega = 2$ rad/s, and $I_C = 2/28^{\circ} \Lambda$.



Q7

Given the series RL circuit calculate the current

through the 4 Ω resistor.

