Problem 1:
1. Using Figure 1, write KVL equation for the closed loop as shown.
2. Using Figure 2, write KCL equations at Nodes A and B.

![Figure 1](image1.png)

![Figure 2](image2.png)

1. \[-V_{R1} + V_s - V_{R4} - V_{IS} + V_{R2} = 0\]

2. **KCL Node A**
   \[i_{R4} - i_{R3} - i_{V5} = 0\]

   **KCL Node B**
   \[i_{R3} - i_{R2} - i_{R5} + i_{S} = 0\]

Problem 3
1. Using the passive sign convention, mark current directions and signs on the resistors and current source and the direction of current flow through the voltage source.
2. Identify all nodes (trivial and non-trivial)
3. Identify all meshes.