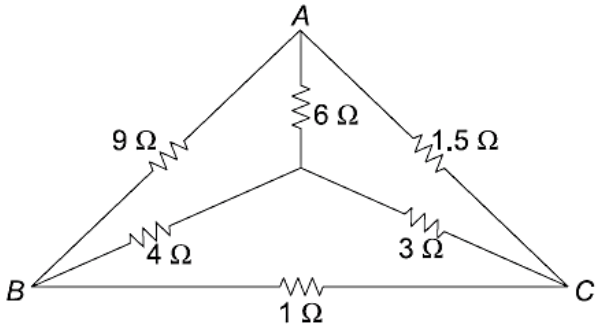
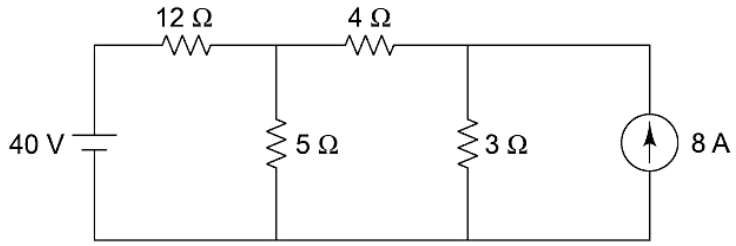
Module 1

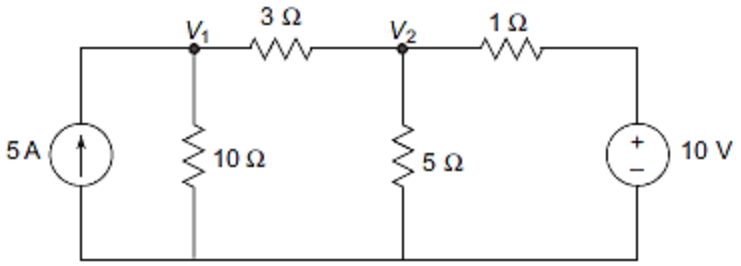
1. Find an equivalent resistance between terminals A and B.



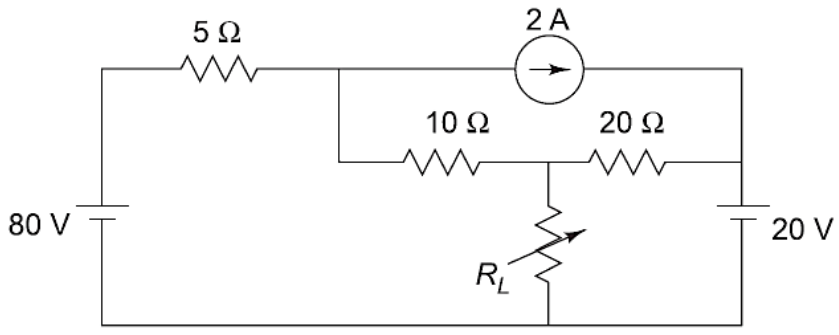
2. Find the value of current flowing through the 4 Ω resistor.



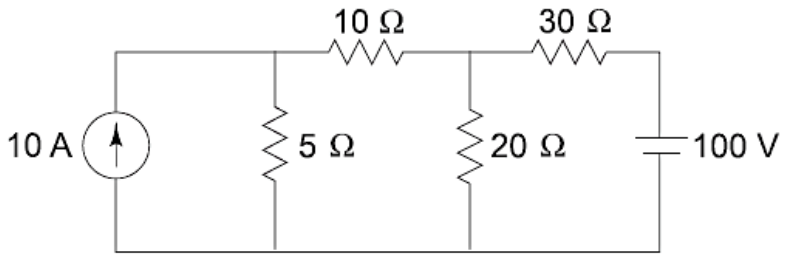
3. Evaluate the current through the 3Ω resistor in the network shown in figure below using node analysis.



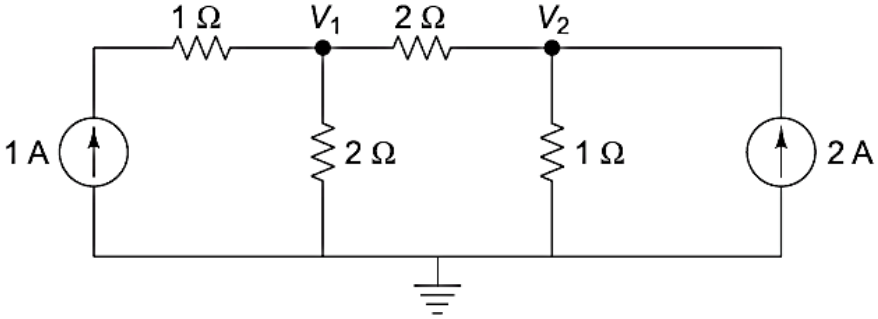
Find the value of resistance R_L for maximum power transfer and calculate the maximum power using Maximum Power Transfer Theorem.



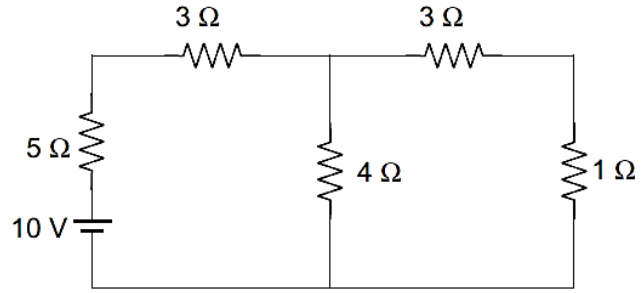
4. Find the value of current flowing through the 10 Ω resistor using Thevenin's Theorem



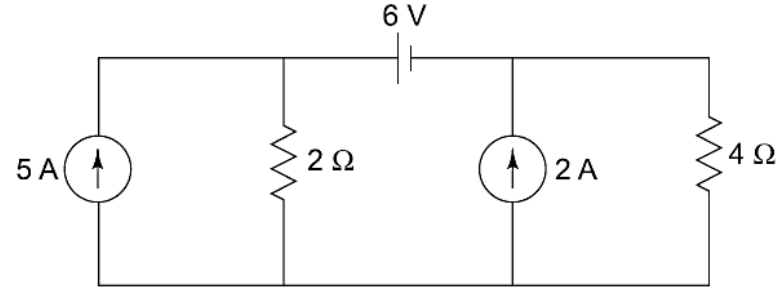
5. Evaluate the current flowing through the 2Ω resistor in the network shown in figure below using node analysis.



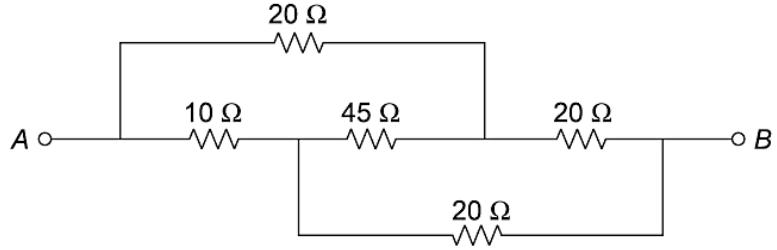
6. Find the value of current flowing through 1 Ω resistor using mesh analysis.



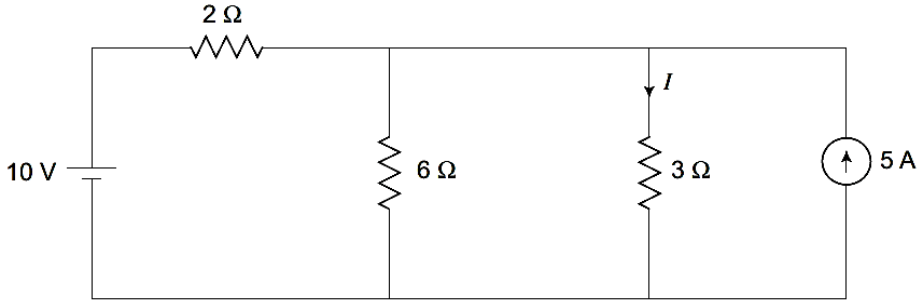
7. Find the value of current flowing in the 4 Ω resistor using source transformation.



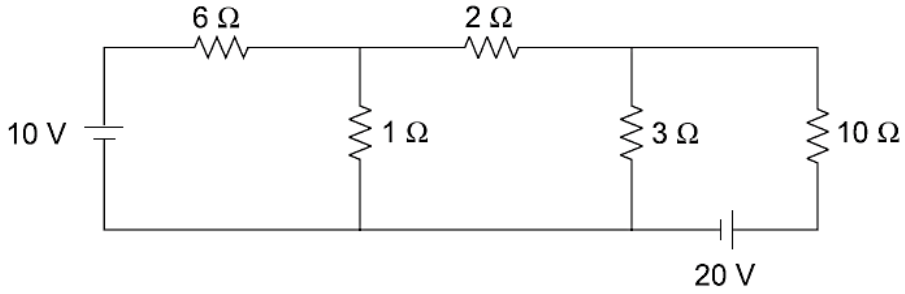
8. Determine the equivalent resistance between terminals A and B.



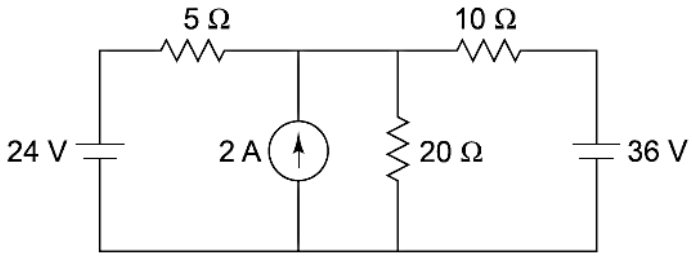
9. Find the value of current flowing through 3 Ω resistor.



10. Evaluate the current flowing through the 2Ω resistor in the network shown in below using mesh analysis.



11. Evaluate the current flowing through the 5 Ω resistor using Superposition Theorem



Module 6

What is the purpose of earthing in electrical installation? Explain different types of electrical earthing.

Explain different types of earthing.

Short Note on Switch Fuse Unit (SFU), MCB, ELCB, MCCB.

Explain different types of cables used for electrical installation.