



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

[www.sathyabama.ac.in](http://www.sathyabama.ac.in)

## Practicing Problems

Program : B.E

Course : CSE

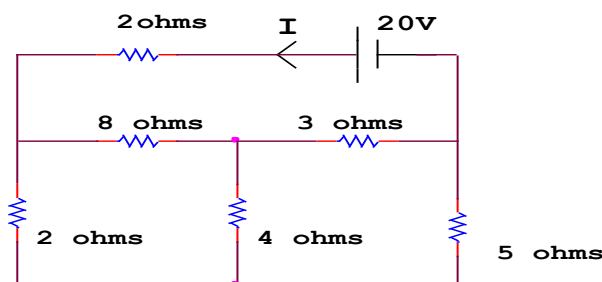
Course code : SEEA1103

Batch : 2020 - 2024

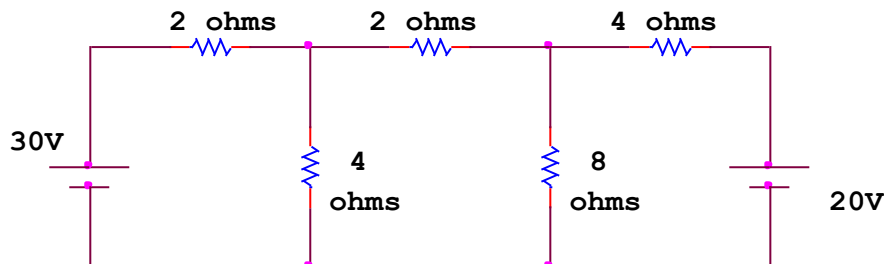
Sem : 1

Unit : 1

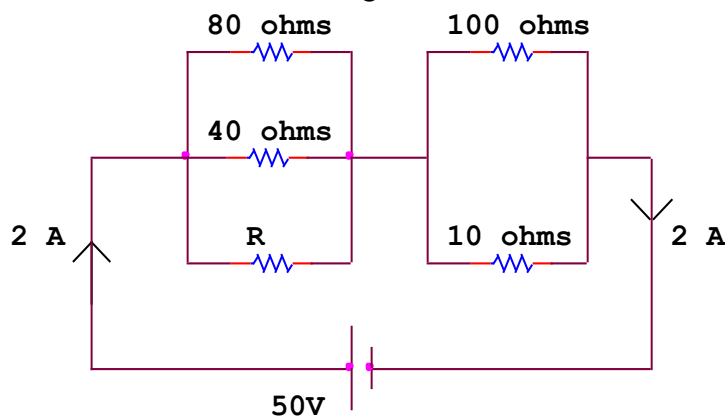
1. Evaluate the current through 2 ohms resistances.



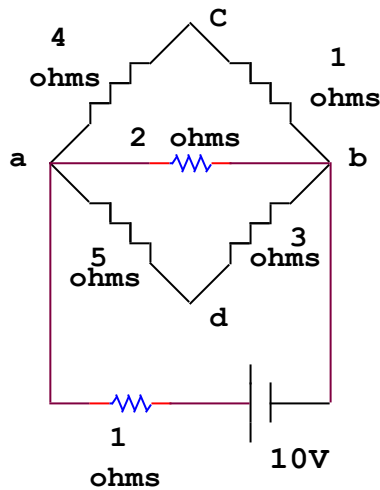
2. Measure the power dissipated across 8 ohms resistor on the circuit shown in the figure



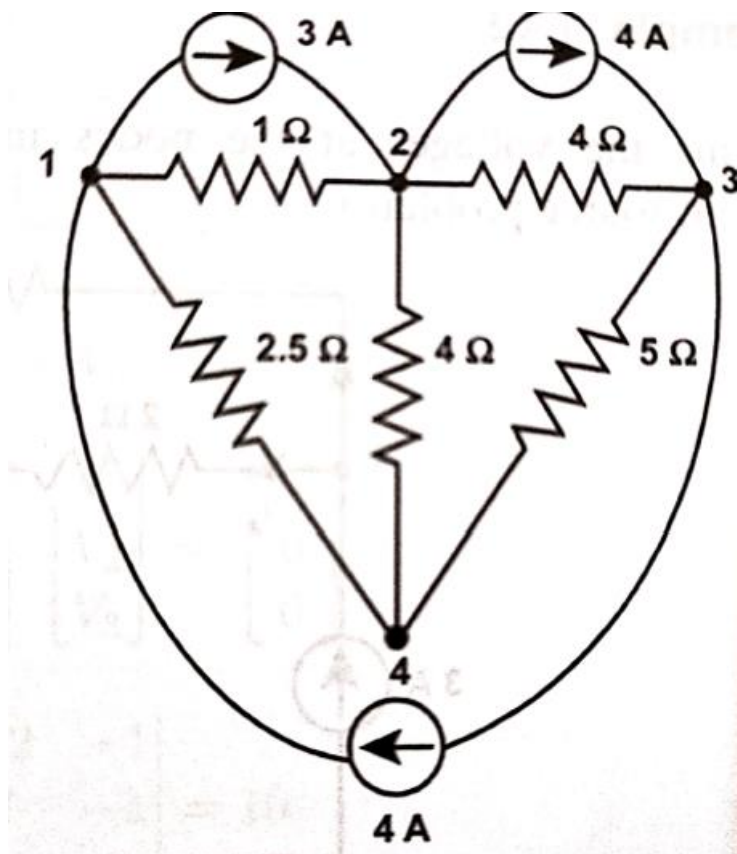
3. Design the value of R for below given circuit.



4. In the circuit shown, evaluate the voltage across  $2\ \Omega$  resistor and the total current delivered by the battery. Use Mesh analysis.



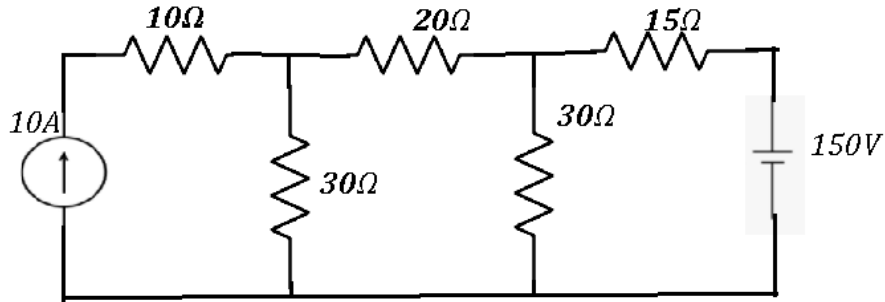
5. For the given electrical circuit, estimate the voltage across  $4\ \Omega$  resistances and  $2.5\ \Omega$  resistance.



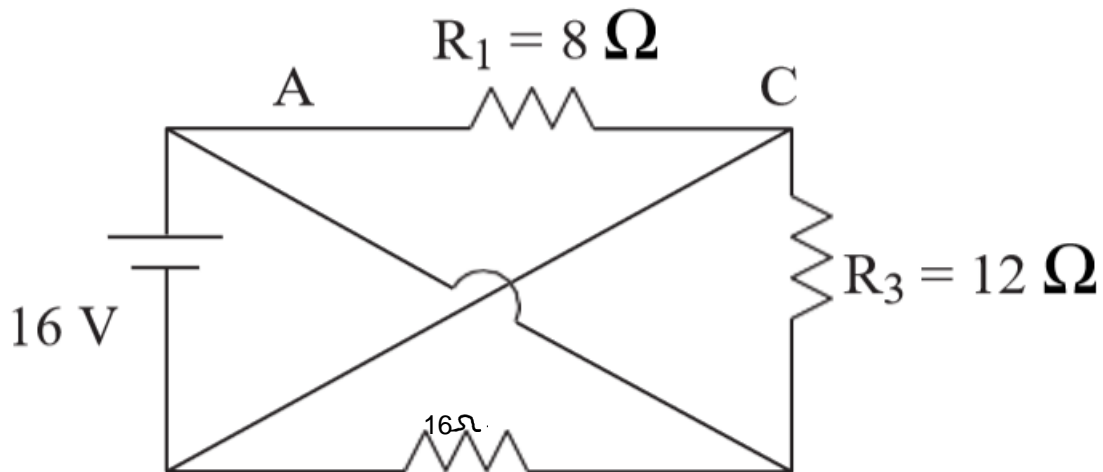
6. Four resistors are in parallel. The current in the first three resistors are 4A, 5A and 6A respectively. The voltage drop across the fourth resistor is 200V. The

total power dissipated is 5KW. Evaluate the values of resistances of the branches and the total resistance.

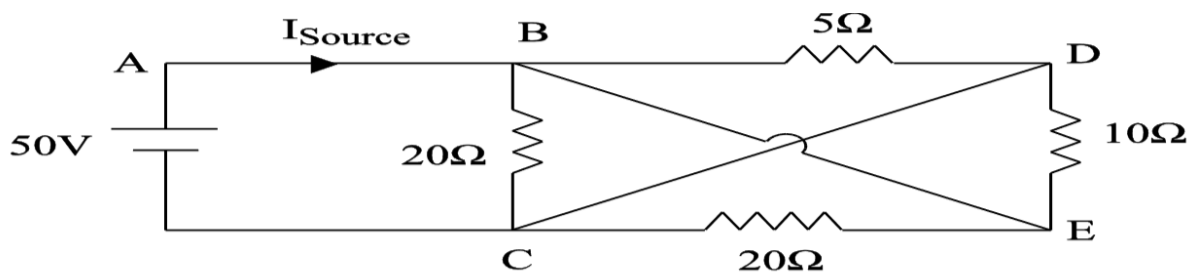
7. Evaluate the Node voltages in the given circuit using nodal analysis. Also find the Current flowing through  $20\Omega$



8. Calculate the total resistance and battery current in the given circuit



9. Calculate the equivalent resistance offered by the circuit to the voltage source and also find its source current



10. Estimate the equivalent resistance between A and B

