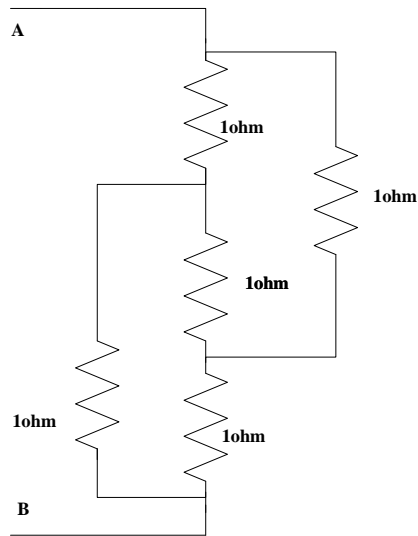


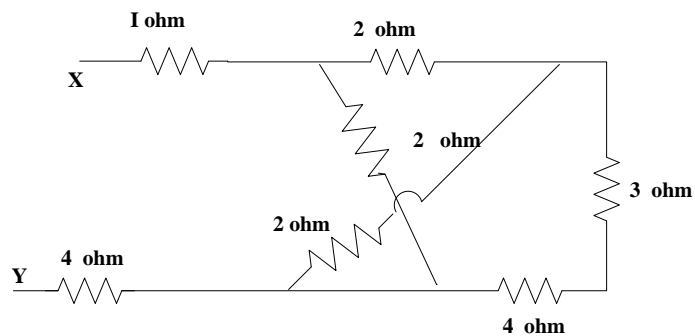
# Basic Electrical Science- Assignment1

**Last Date for Submission: 22-01-2021**

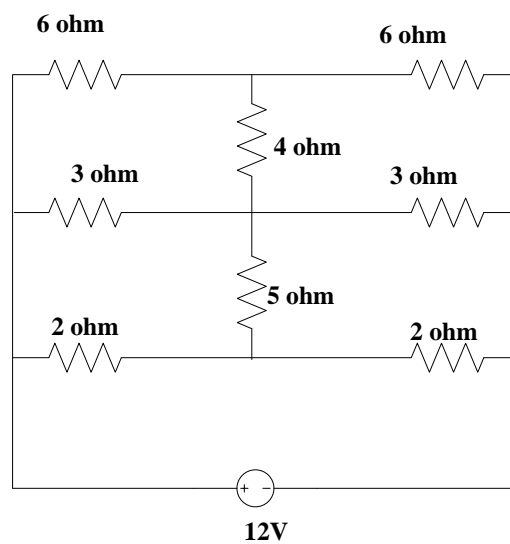
1. Find the resistance between A and B?



2. Find the resistance between X and Y?

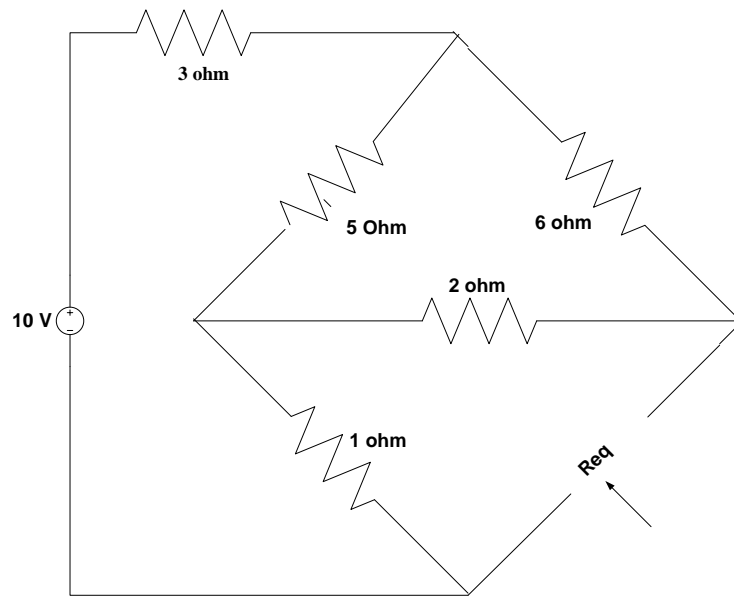


3. Find the source current?

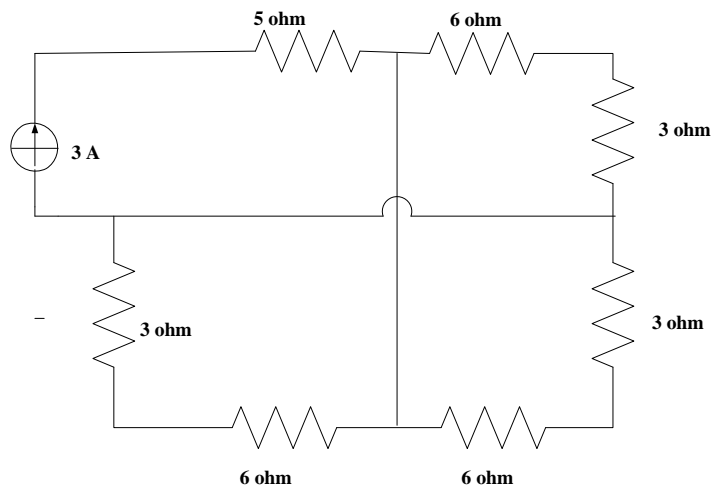


## Basic Electrical Science- Assignment1

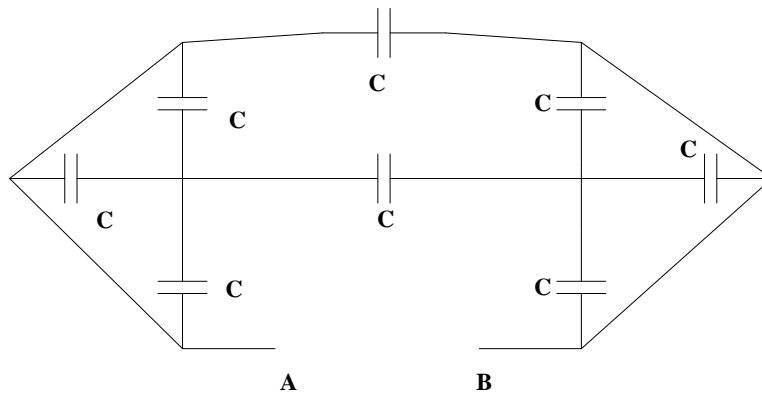
4. Find  $R_{eq}$ ?



5. Find the power delivered by current source?

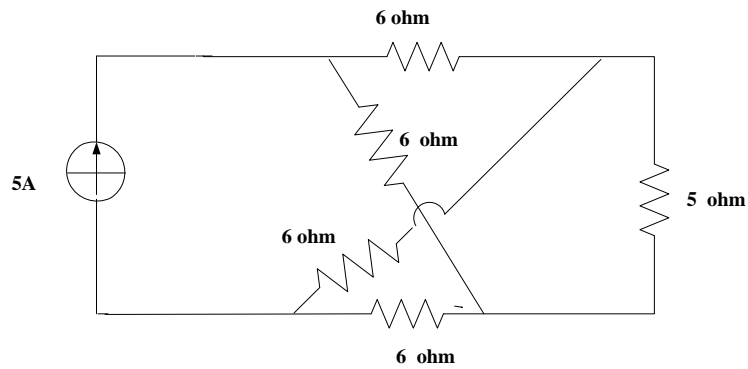


6. Find the equivalent capacitance between A and B?

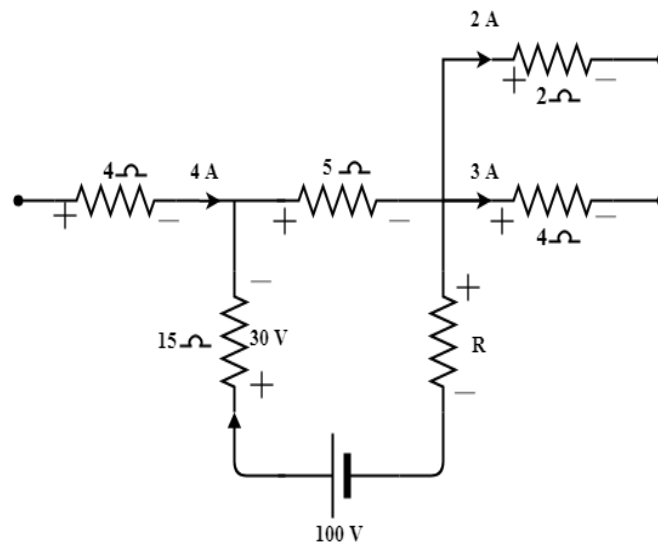


## Basic Electrical Science- Assignment1

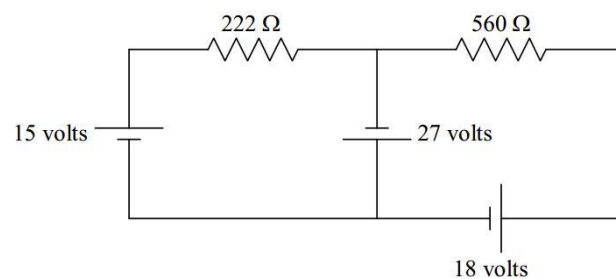
7. Find the power delivered by current source?



8. a. Determine the value of R in the circuit shown below.  
b. Find the power absorbed by resistor R in circuit shown below.

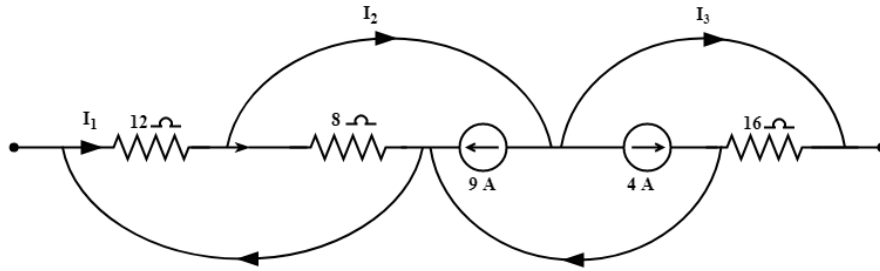


9. Find the current through each of the resistors in the circuit shown below?

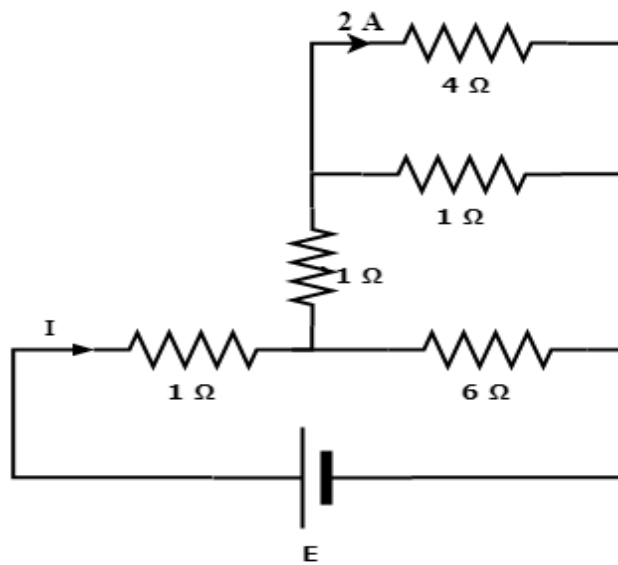


## Basic Electrical Science- Assignment1

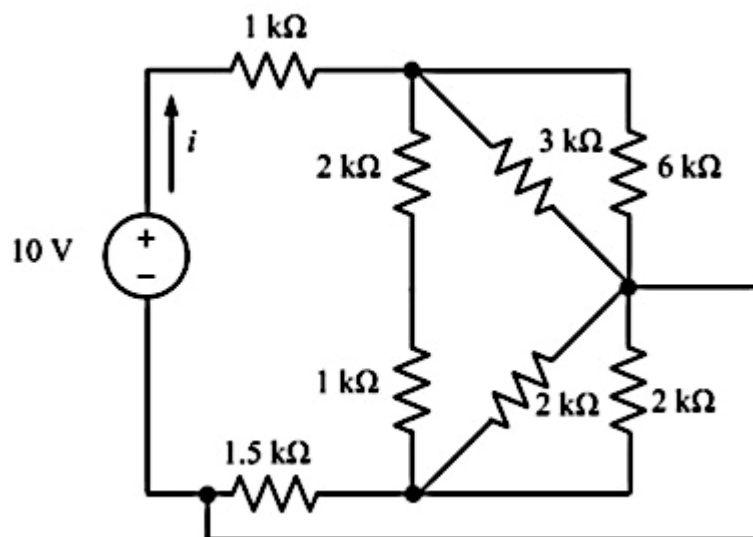
10. Determine the value of  $I_1$ ,  $I_2$ , and  $I_3$  in the circuit shown below?



11. Determine the value of  $E$ ,  $I$  in the circuit shown below?

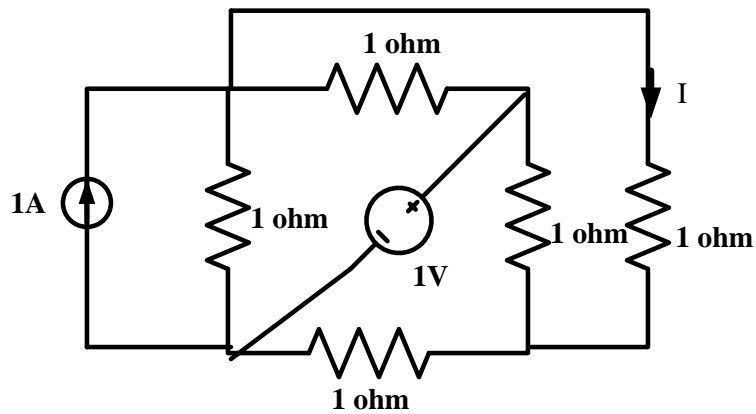


12. Find the current  $i$  in the circuit?

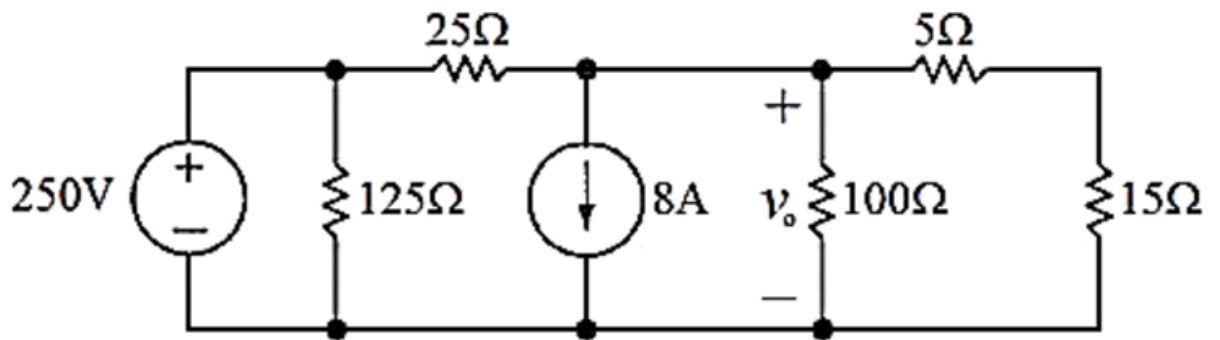


## Basic Electrical Science- Assignment1

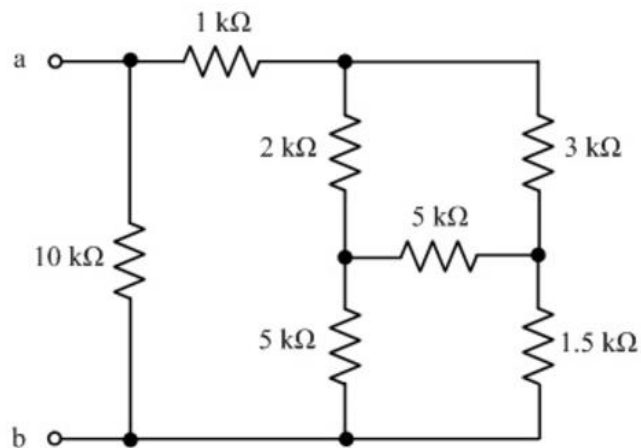
13. Consider the circuit shown in figure. Determine the current  $I$ .



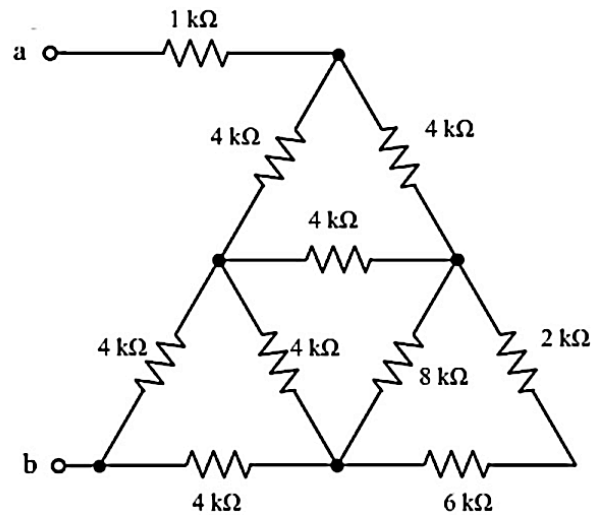
14. Find  $V_o$  the circuit shown below?



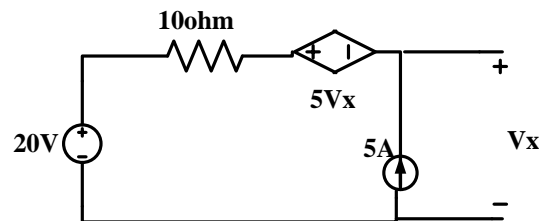
15. Find the equivalent resistance between a & b in the circuits shown in below?



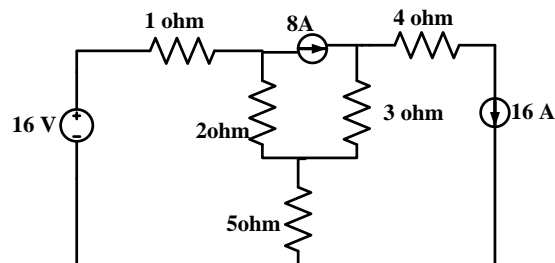
## Basic Electrical Science- Assignment1



16. Determine  $V_x$  by using superposition theorem



17. Determine the power absorbed by 50Ω resistance using thevenin's theorem



18. Determine thevenin's equivalent circuit between A and B

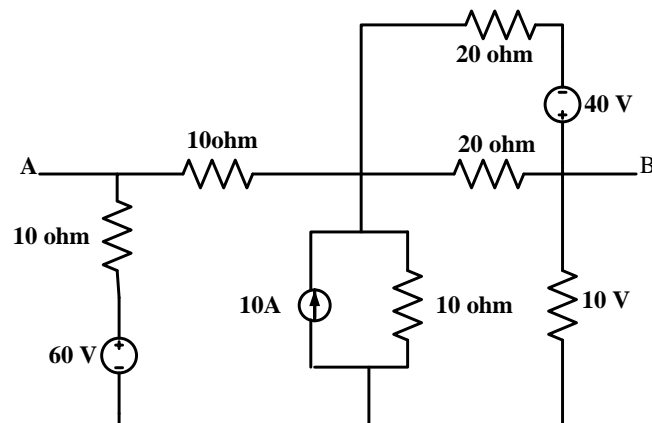
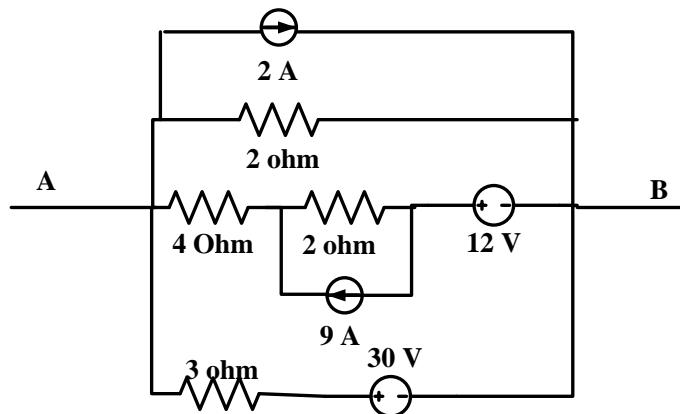


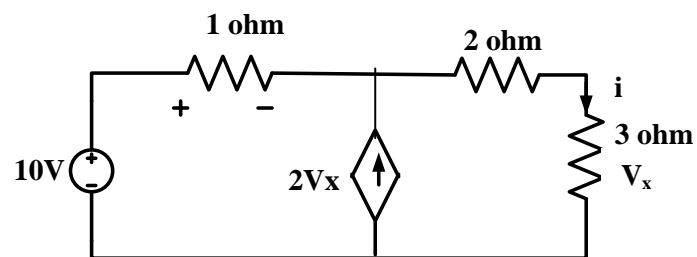
Fig 6

## Basic Electrical Science- Assignment1

19. Determine Norton's equivalent between A and B?



20. Determine current  $i$  by using Thevenin's and Norton's theorem



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