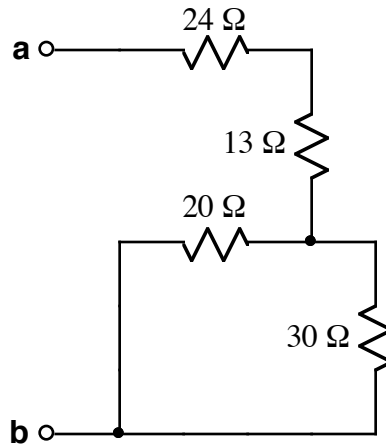
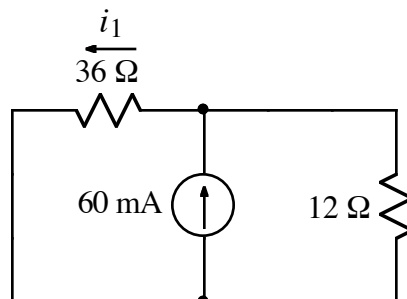


1.

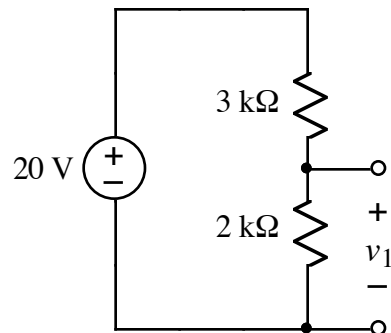


Find the value of total resistance between terminals **a** and **b**.

2.

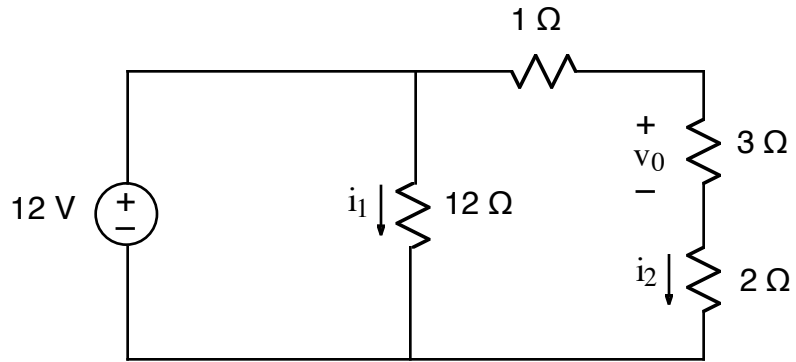


a) Use the current-divider formula to calculate i_1 .



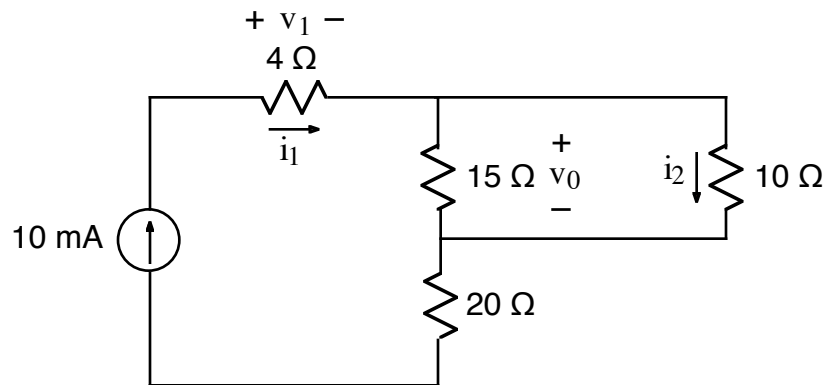
b) Use the voltage-divider formula to calculate v_1 .

3.



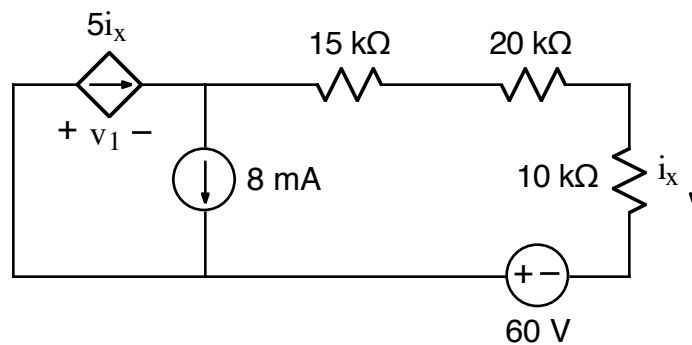
- Calculate i_1 , i_2 , and v_0 .
- Find the power dissipated for every component, including the voltage source.

4.



Calculate i_1 , i_2 , and v_0 .

5.



Find i_x , v_1 , and the power dissipated by the dependent source.