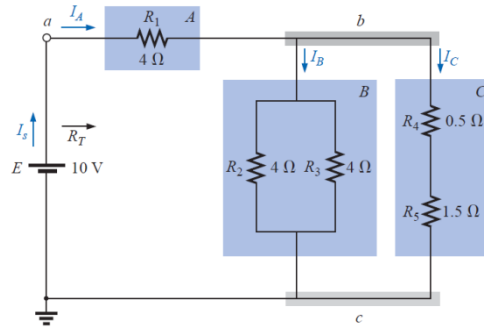


Series-Parallel Networks

series-parallel networks are networks that contain both series and parallel circuit configurations.

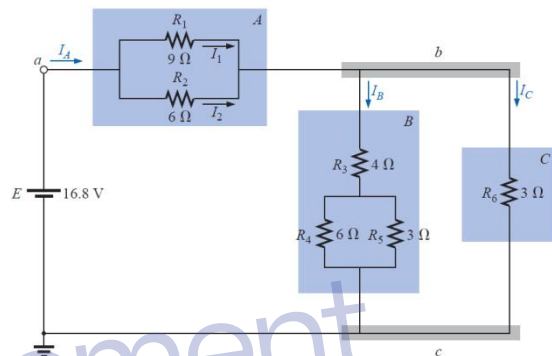
Example 1

Find the indicated currents of the figure shown below



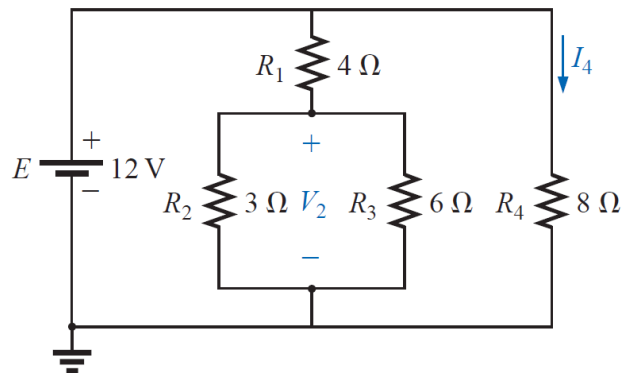
Example 2

Find the indicated currents of the figure shown below



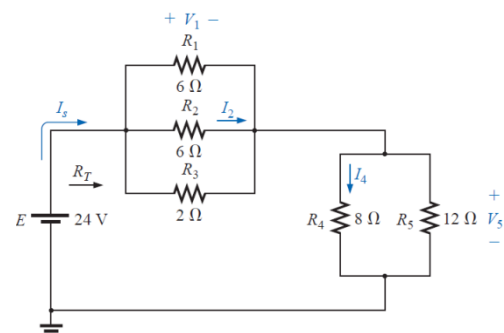
EXAMPLE 3

Find the current I_4 and the voltage V_2 for the network shown below



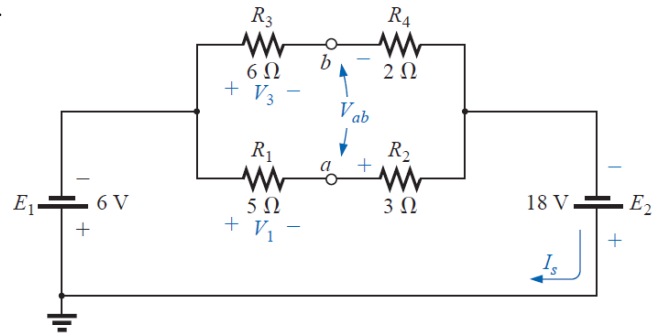
Example 4

Find the indicated currents and voltages for the network shown below



EXAMPLE 5

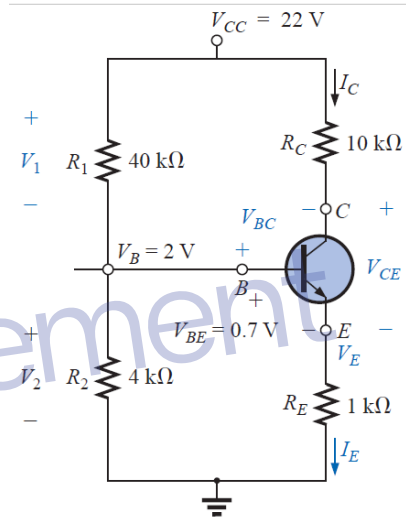
- Find the voltages V_1 , V_3 , and V_{ab} for the network shown below.
- Calculate the source current I_s .



EXAMPLE 6

For the transistor configuration shown below, in which V_B and V_{BE} have been provided:

- Determine the voltage V_E and the current I_E .
- Calculate V_1 .
- Determine V_{BC} using the fact that the approximation $I_C = I_E$ is often applied to transistor networks.
- Calculate V_{CE} using the information obtained in parts (a) through (c).



Example 7

Find the indicated currents of the figure shown below

