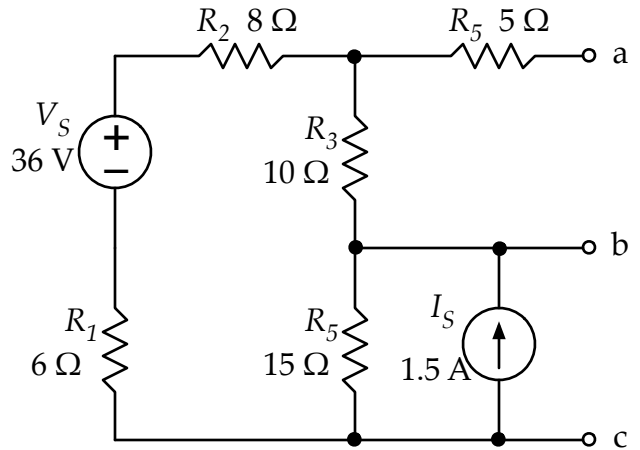


For the circuit shown, find the Thevenin and Norton equivalents for the port defined by nodes  $a$  and  $b$ . Then find the Thevenin and Norton equivalents for the port defined by the nodes  $b$  and  $c$ .



$a - b: V_{Th} = \underline{\hspace{2cm}}, R_{Th} = \underline{\hspace{2cm}}, I_N = \underline{\hspace{2cm}}$

$b - c: V_{Th} = \underline{\hspace{2cm}}, R_{Th} = \underline{\hspace{2cm}}, I_N = \underline{\hspace{2cm}}$