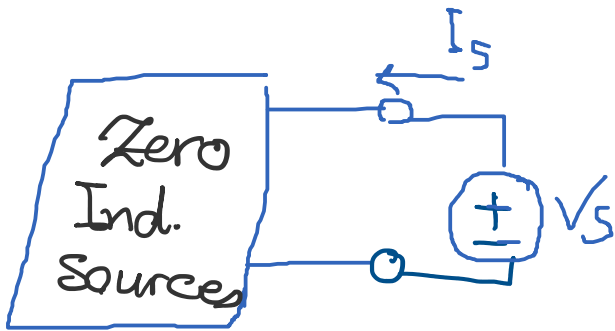


## Important Notes Regarding Thevenin and Norton Equivalents

- $V_{th}=VOC$  (open circuit)
- $I-Norton=ISC$  (short circuit)
- If there is No INDEPENDENT Sources
  - both  $V_{th}$  and  $I-Norton=0$
- To find  $R_{th}=R_{eq}$ , ALWAYS set the INDEPENDENT sources=0
  - If no dependent source  $\rightarrow$  you may be able to find  $R_{th}$  by series, parallel rules
  - If there is dependent source, you need to apply  $V_s$  and find  $I_s$ . Then  $R_{th}=V_s/I_s$

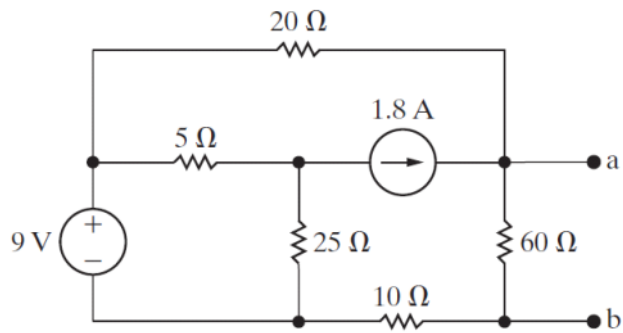


$$R_{th} = R_{eq} = \frac{V_s}{I_s}$$

## Exercise 6, Question 1

Find Thevenin Equivalent from terminals a, b:

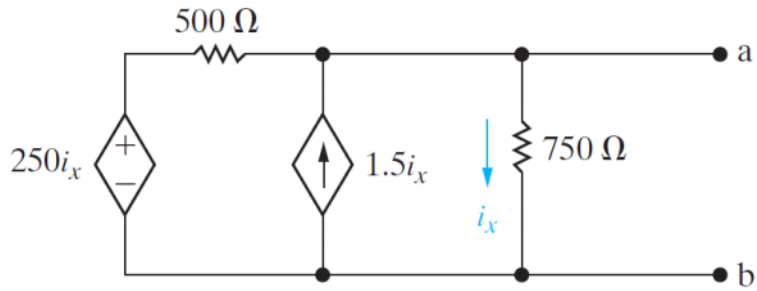
Figure P4.78



## Exercise 6, Question 2

**4.81** Find the Norton equivalent with respect to the terminals a,b for the circuit seen in Fig. P4.81.

**Figure P4.81**



## Exercise 6, Question 3

Find Thevenin Equivalent seen by the 10 Ohm resistor:

