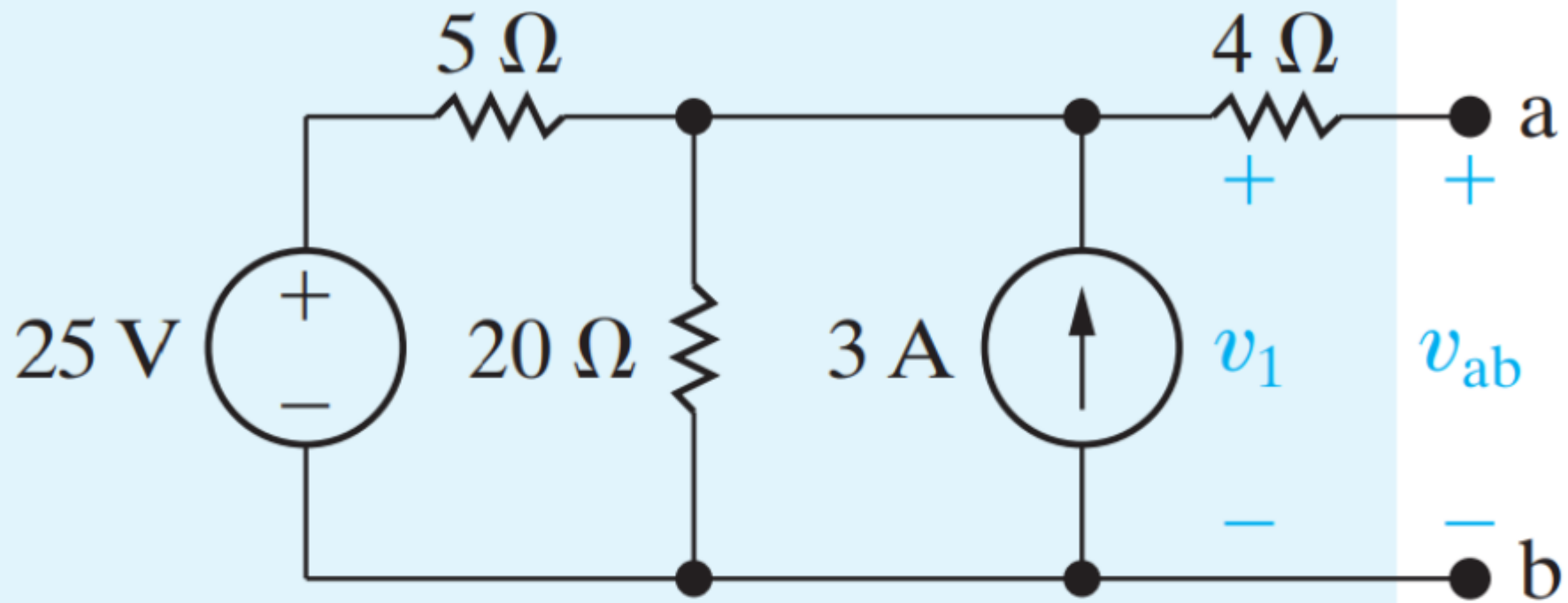


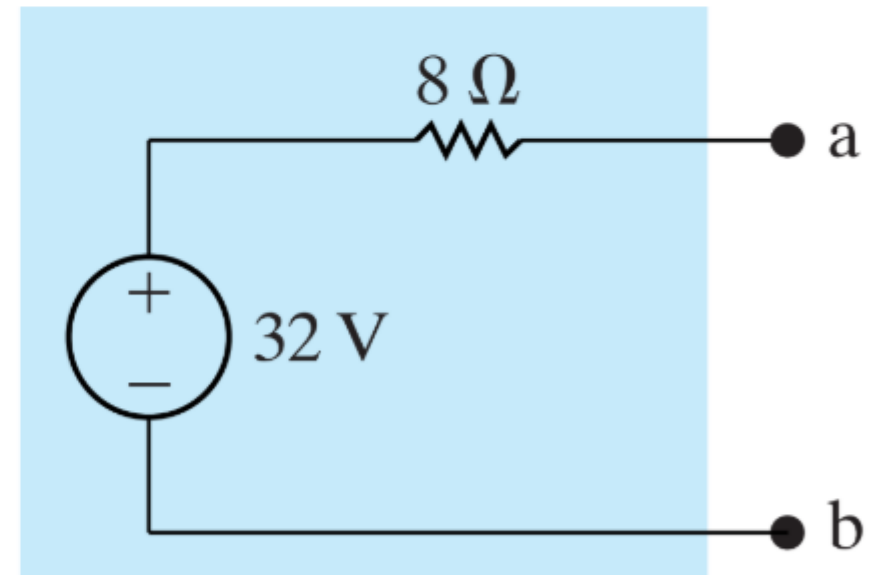
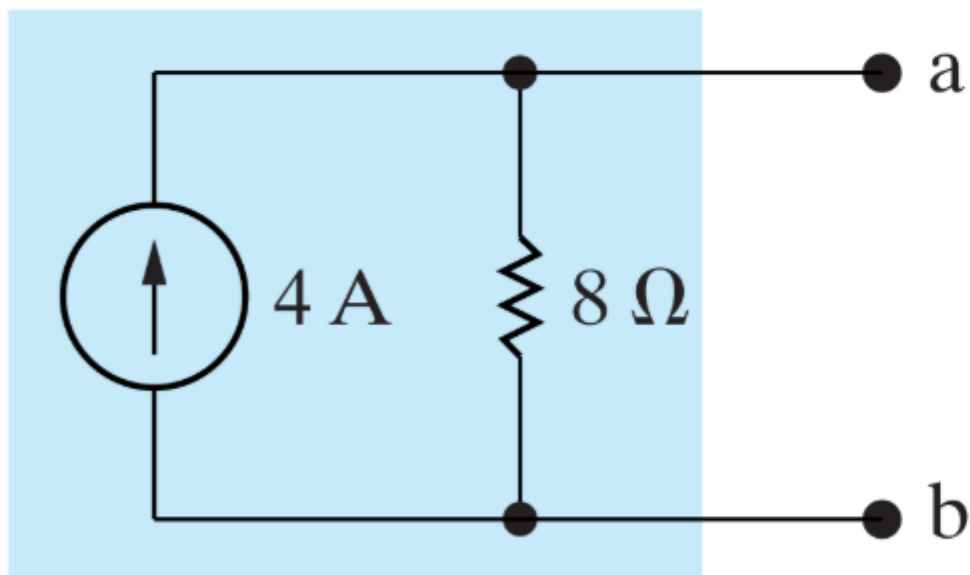
Thévenin and Norton Equivalent Circuits

Giannacco



A Norton equivalent circuit consists of an independent current source in parallel with the Norton equivalent resistor.

A Thévenin equivalent circuit is an independent voltage source in series with the Thévenin equivalent resistor.



We can derive each of these equivalent circuits simply by making a source transformation. Thus the Norton current equals the short-circuit current at the terminals of interest, and the Norton resistance is identical to the Thévenin resistance.

$$I_{Norton} = I_{ab}$$

$$R_{Thévenin} = R_{Norton}$$