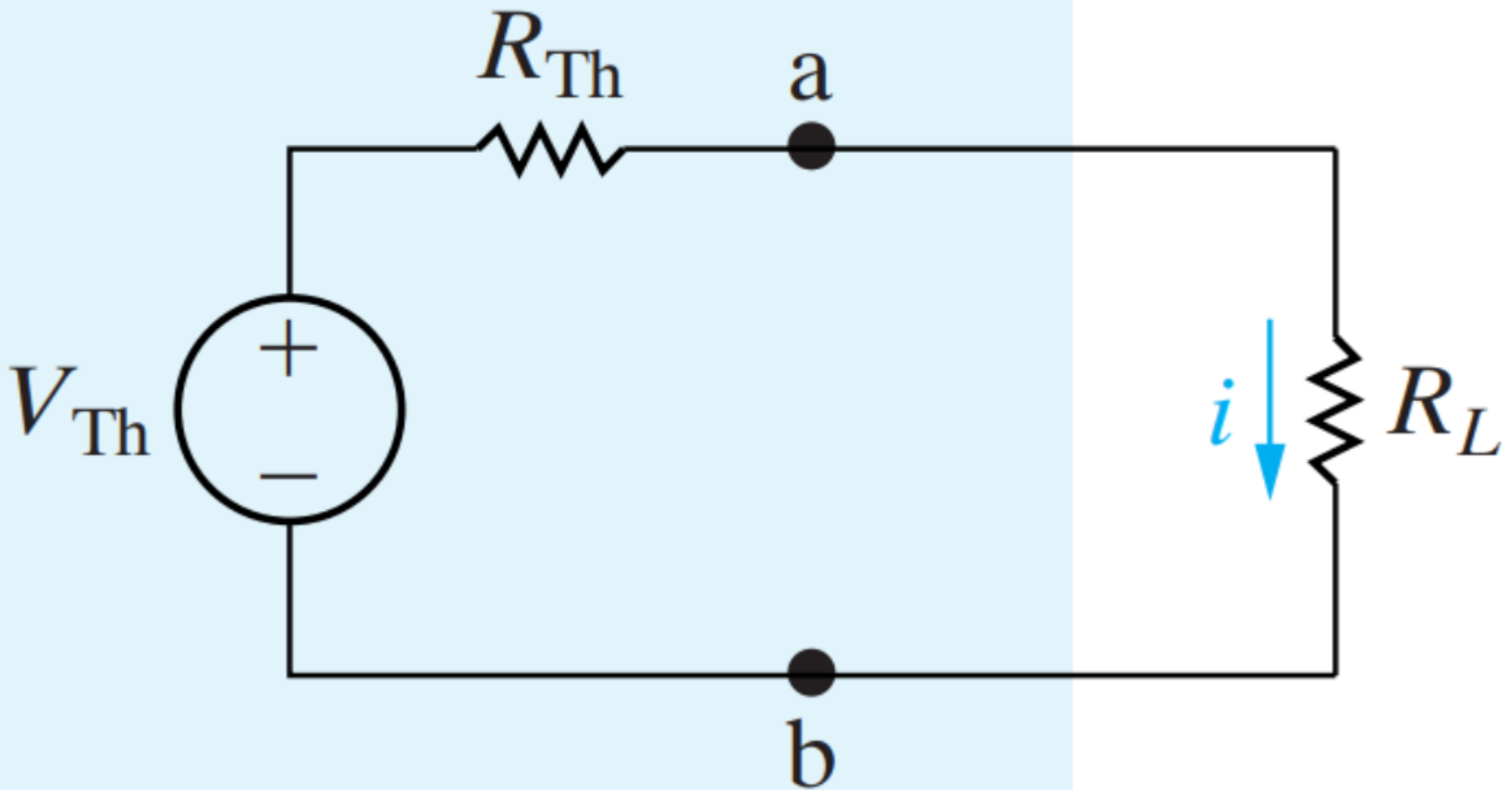# Maximum Power Transfer Theorem

$$P_{Max} = \frac{V_{Th}^2}{4R_L} = \frac{V_{Th}^2}{4R_{Th}} = \frac{I_N^2 R_{Th}}{4} = \frac{I_N^2 R_L}{4}$$



Maximum power transfer occurs when the load resistance equals the Thévenin resistance.