

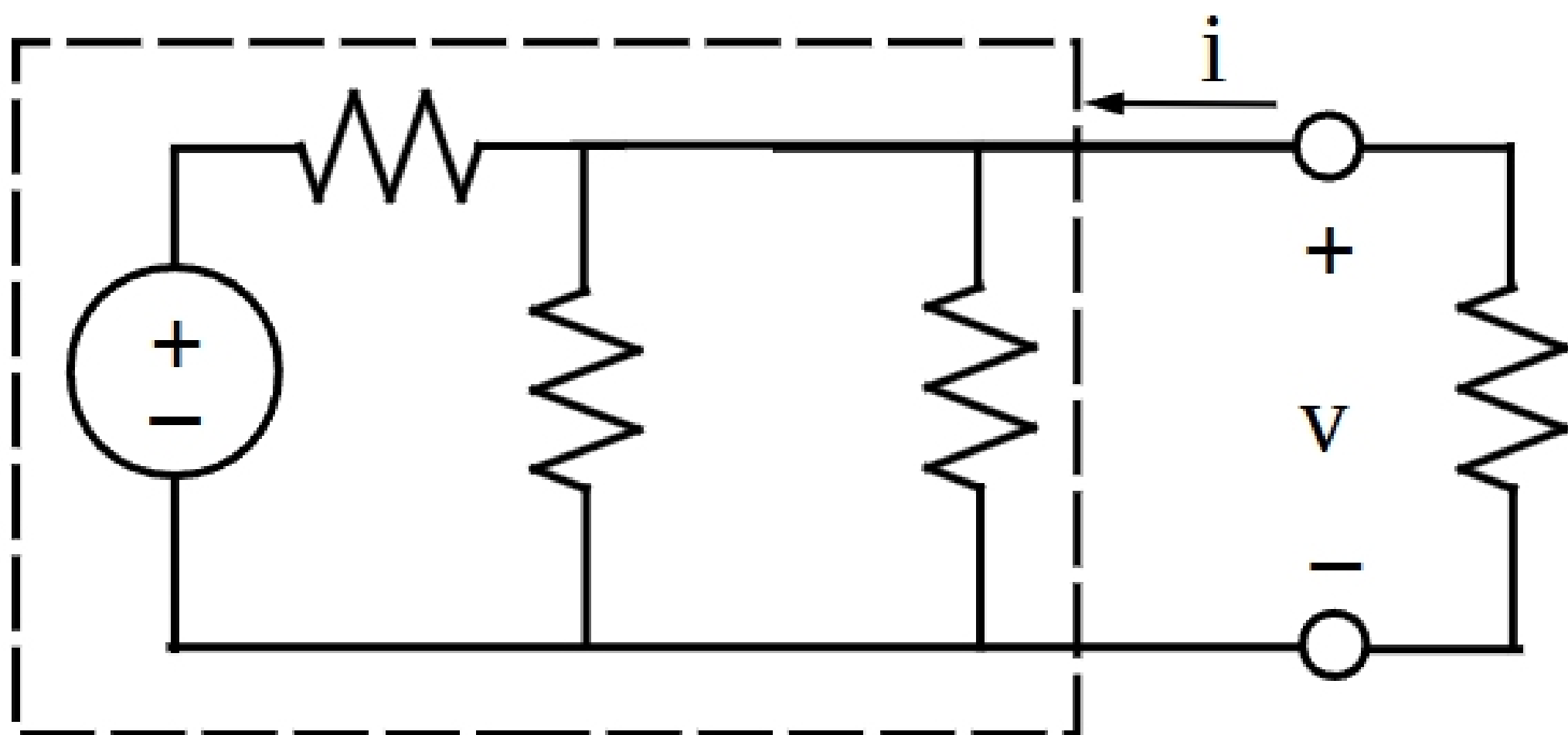
Source Transformations

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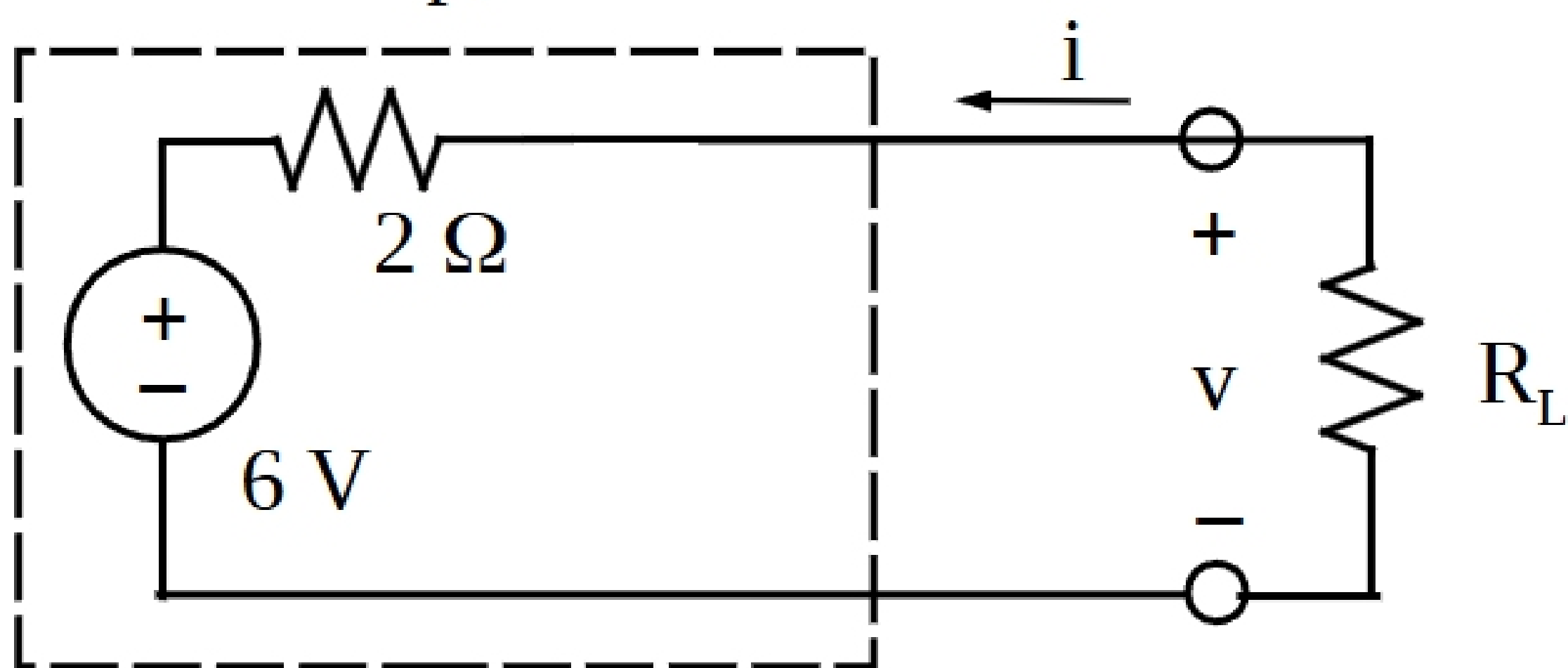
A technique for analyzing circuits that does not require solving simultaneous equations.

Terminology:

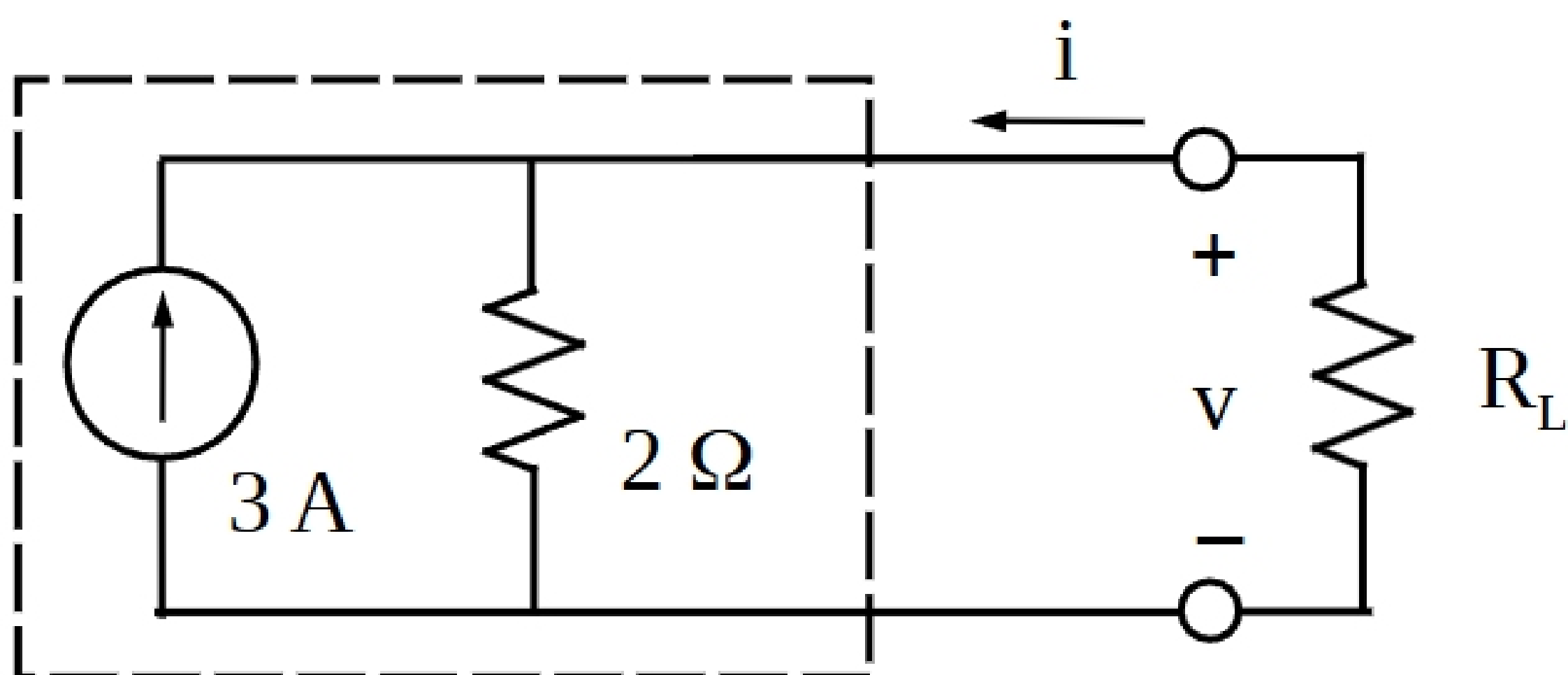
A **two-terminal network** is an interconnection of circuit elements which has only two accessible terminals for connection to other networks.



Equivalent two-terminal networks are two-terminal networks with the same terminal current-voltage relationship, but different internal details.



$$v = 6 + 2i$$



$$i + 3 = v / 2 \rightarrow v = 6 + 2i$$

This is a **source transformation**.

Source transformations are possible for two terminal networks with dependent sources as shown below.

