Circuits II
EE221
Unit 2
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Review: Impedance Circuit Analysis with nodal, mesh, superposition, source transformation, equivalent circuits and SPICE analyses.

Equivalent Circuits

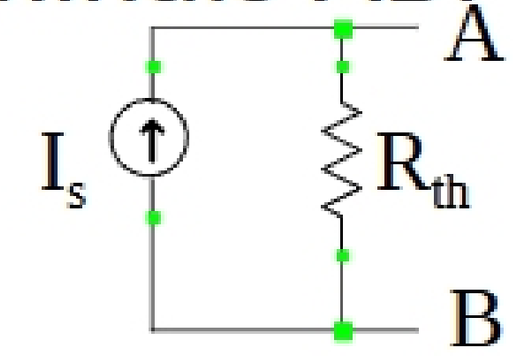
- Circuits containing different elements are equivalent with respect to a pair of terminals, if and only if their voltage and current draw for any load is identical.

- More complex circuits are often reduced to Thévenin and Norton equivalent circuits.

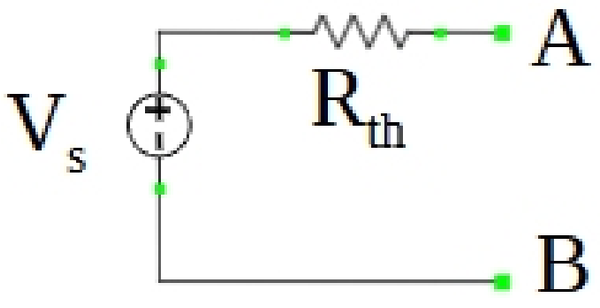
Equivalent Circuit (Example)

Find and compare the voltages and currents generated in 3 of the following loads across terminals AB:

- open circuit
- resistance R_L
- short circuit



Norton



Thévenin