















Comments on Dependent Sources

A dependent source establishes a voltage or current whose value depends on the value of a voltage or current at a specified location in the circuit. (imaginary device, used to model behavior of transistors & amplifiers)

To specify a dependent source, we must identify:

- 1. the controlling voltage or current (must be calculated, in general)
- 2. the relationship between the controlling voltage or current and the supplied voltage or current
- 3. the reference direction for the supplied voltage or current

The relationship between the dependent source and its reference cannot be broken!

 Dependent sources cannot be turned off for various purposes (*e.g.* to find the Thévenin resistance).

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