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Chomsky normal form

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A grammar is said to be of *Chomsky normal form* if every production has either of the two forms

$$A \rightarrow BC \quad \text{or} \quad A \rightarrow a$$

where A, B, C are non-terminal symbols, and a is a terminal symbol.

Grammars of this sort are context-free, hence they describe context-free languages. Moreover, given any context-free language not containing the empty word λ , there exists a Chomsky normal form grammar which describes it.