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order of factors in infinite product

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| Related topic | AbsoluteConvergenceOfInfiniteProductAndSeries |
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| Related topic | SumOfSeriesDependsOnOrder |
| Defines | value of an infinite product |

Theorem. If the infinite product

$$\prod_{\nu=1}^{\infty} (1+c_{\nu}) = (1+c_1)(1+c_2) \cdots$$

of complex numbers $1+c_{\nu}$ is <http://planetmath.org/AbsoluteConvergenceOfInfiniteProduct> convergent, then its *value*, i.e. $\lim_{n \rightarrow \infty} \prod_{\nu=1}^n (1+c_{\nu})$, does not depend on the n is zero.