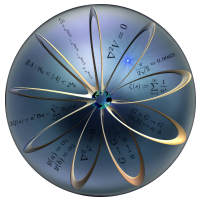

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inverse number

Canonical name	InverseNumber
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Related topic	ConditionOfOrthogonality
Related topic	InverseFormingInProportionToGroupOperation
Defines	reciprocal number

The *inverse number* or *reciprocal number* of a non-zero real or complex number a may be denoted by a^{-1}, and it the quotient $\frac{1}{a}$ (so, it is really the -1^{th} power of a).

- Two numbers are inverse numbers of each other if and only if their product is equal to 1 (cf. opposite inverses).
- If a ($\neq 0$) is given in a quotient form $\frac{b}{c}$, then its inverse number is simply
$$\left(\frac{b}{c}\right)^{-1} = \frac{c}{b}.$$
- Forming the inverse number is also a multiplicative function, i.e.
$$(bc)^{-1} = b^{-1}c^{-1}$$
(to be more precise, it is an automorphism of the multiplicative group of $\mathbb{R}$ resp. $\mathbb{C}$).