Why

Is the inverse of an element function the element function of a different element?

Definition

The *inverse* of an element of an algebra (also called the *inverse element*) is the element (if it exists) whose corresponding element function under the operation is the inverse of the first element's function.

Notation

Let $(A, +)$ be an algebra. Let $a \in A$. If the inverse element for a exists and is unique we denote it by a^{-1}. In other words $+^{a^{-1}} \circ +^a = \mathrm{id}_A$

Inverse Elements

Function Inverses

Element Functions

Function Images

Function Composites

Operations

Functions

Relations

Pair Intersections

Set Products

Set Powers

Ordered Pairs

Unordered Triples

Pair Unions

Set Symmetric Differences

Set Unions

Set Complements

Unordered Pairs

Empty Set

Set Differences

Set Specification

Set Inclusion

Standardized Accounts

Accounts

Deductions

Quantified Statements

Logical Statements

Statements

Identities

Sets

Names

Letters

Objects