

## INVERSE ELEMENTS

## 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  $+a^{-1} \circ +a = \mathrm{id}_A$ 

