Why

We name a set together with an operation.

Definition

An *algebra* is an ordered pair whose first element is a non-empty set and whose second element is an operation on that set. The *ground set* of the algebra is the set on which the operation is defined.

Notation

Let A be a non-empty set and let $+ : A \times A \to A$ be an operation on A. As usual, we denote the ordered pair by $(A, +)$.

Algebras

↓

Operations

↓

Functions

↓

Relations

↓

Ordered Pairs

Unordered Pairs

↓

Set Specification

Empty Set

Set Inclusion

Set Equality

Sentences

Standardized Accounts

Sets

Accounts

Identity

Letters

Objects