Why

Take an element of an algebra, and consider the function defined on the ground set which maps elements to the result of the operation applied to the fixed element and the given element.

Definition

Let $(A, +)$ be an algebra. For each $a \in A$, denote by $+_a : A \to A$ the function defined by

$$+_a(b) = a + b.$$

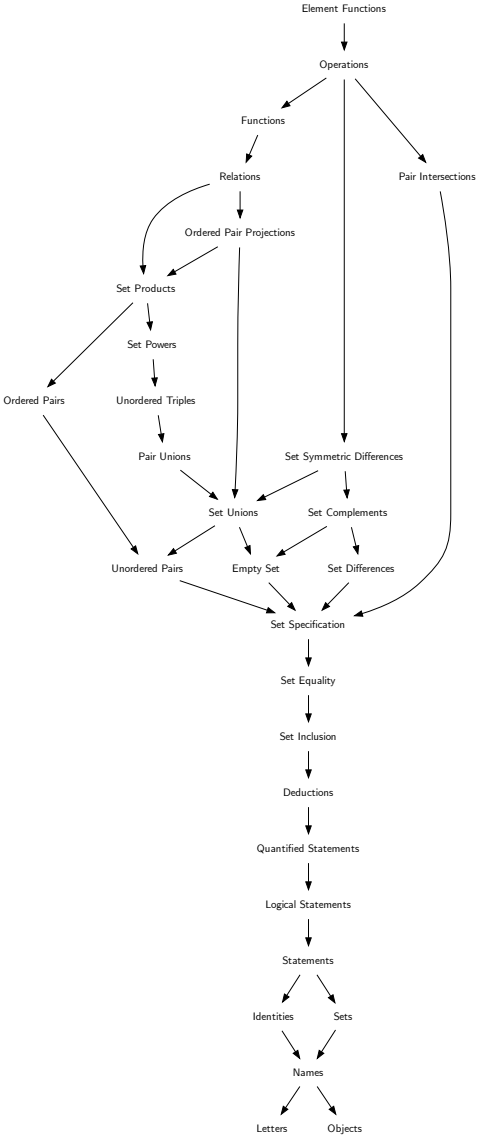
We call $+_a$ the *left element function* of a.

Similarly, denote by $+^a : A \to A$ the function defined by

$$+^a(b) = b + a.$$

We call $+^a$ the *right element function* of a

The idea is that elements of an algebra can always be associated with functions.


Element Functions
Operations
Functions
Relations
Pair Intersections
Ordered Pair Projections
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 Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects