

Algebras

1 Why

We name a set together with an operation.

2 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.

2.1 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, +).