Why

It is extremely common to use the first so many natural numbers as an index set.

Definition

A *natural family* of sets is a indexedkj family of sets whose index set is an subset of the natural numbers smaller than or equal to some specified natural number.

Notation

Let n be a natural number. Let A be a non-empty set. Let $a : \{1, \ldots, n\} \to A^*$ We often denote the family of a by $A_1, \ldots, A_n$. We often say, "let $A_1, \ldots, A_n$ be sets," without any reference to the fact that we are thinking of a family.

Natural Families

Families

Functions

Relations

Natural Numbers

Ordered Pairs

Set Unions

Set Intersections

Unordered Pairs

Empty Set

Pair Intersections

Power Set

Set Specification

Set Inclusion

Standardized Accounts

Definitions

Accounts

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Quantified Statements

Logical Statements

Statements

Identities

Sets

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Letters