Why

We want to associate objects with series of the natural numbers zero and one.[1]

Definition

A *digital datum* is any finite sequence in the set $\{0, 1\}$. If the sequence has length one, we refer to it as a *bit*. Using this terminology, it is natural to call the elements of a digitial datum *bits*.

If the sequence has length eight, we refer to it as a *byte*. Using this terminology, a *kilobyte* is $2^{10} = 1024$ bytes.

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[1]This explanation requires one more step, which future editions will discuss.

Digital Data

Natural Exponents

Natural Products

Natural Sums

Sequences

Families

Recursion Theorem

Functions

Peano Axioms

Relations

Natural Induction

Cartesian Products

Natural Numbers

Set Powers

Intersection of Empty Set

Successor Sets

Unordered Triples

Set Intersections

Pair Unions

Ordered Pairs

Set Differences

Set Unions

Pair Intersections

Empty Set

Unordered Pairs

Set Specification

Set Inclusion

Standardized Accounts

Accounts

Deductions

Quantified Statements

Logical Statements

Statements

Identities

Sets

Names

Letters

Objects