Why

We want to talk about categorizing documents.

Definition

Let X be a set of documents. To be concrete, for $n \in \mathbf{N}$, X may be all length n character sequences in some alphabet of digital symbols.

Document Topic Classifiers

Digital Symbols

Digital Integers

Digital Naturals

Bit Strings

Natural Powers — Codes — Classifiers

Factorials — Dot-Dash Code — Predictors

Size of Direct Product — Sequences — Flash Code

Number of Set Products — Alphabets

Natural Products — Number of Disjoint Unions — Finite Set Examples — Lists

Natural Sums — Set Numbers — Direct Products

Finite Sets

Recursion Theorem — Equivalent Sets

Natural Order — Function Inverses — Family Unions and Intersections

Integer Numbers — Peano Axioms — Function Images — Function Composites — Families

Equivalence Relations — Functions

Natural Induction — Relations

Ordered Pair Projections

Set Products

Set Powers — Generalized Set Dualities

Natural Numbers — Set Partitions — Intersection of Empty Set — Successor Sets — Unordered Triples — Set Unions and Intersections — Set Dualities

Set Intersections — Pair Unions — Ordered Pairs — Set Complements

Set Unions — Set Differences — Pair Intersections

Unordered Pairs — Empty Set

Set Specification

Set Equality

Set Inclusion

Deductions

Quantified Statements

Logical Statements

Statements

Identities — Sets

Names

Letters — Objects