Why

Definition

The *data matrix* corresponding to a data set of n records which are length d tuples of real numbers is the n by d matrix whose ith row is the i element of the data set.

Notation

Let R denote the set of real numbers. Let $(a^1, \ldots, a^n)$ where $a^i \in R^n$ for $i = 1, \ldots, n$. Let A be the $n \times d$ matrix whose rows are the a^i. Then A is the data matrix of $(a^1, \ldots, a^n)$.

Data Matrix

Datasets

Matrices

Direct Products

Vectors

Fields

N-Dimensional Space

Groups

Real Numbers

Space

Families

Algebras

Rational Numbers

Operations

Integer Numbers

Functions

Equivalence Relations

Relations

Cartesian Products

Set Powers

Natural Numbers

Unordered Triples

Partitions

Successor Sets

Intersection of Empty Set

Ordered Pairs

Pair Unions

Set Intersections

Set Unions

Set Differences

Unordered Pairs

Empty Set

Pair Intersections

Set Specification

Set Inclusion

Standardized Accounts

Definitions

Accounts

Deductions

Quantified Statements

Logical Statements

Statements

Identities

Sets

Names

Objects

Letters