Why

Definition

The *dimension* of a subspace is the number of vectors in a spanning basis.

0.1 Notation

We denote the dimension of the subspace $L \subset \mathbf{R}^n$ by

$$\dim L.$$

Subspace Dimensions

Vector Space Dimensions

Vector Space Bases

Linearly Dependent Vectors   Span

Linear Combinations   Subspaces

Numberings   Vectors

Finite Sets   Fields   N-Dimensional Space

Equivalent Sets   Groups   Real Numbers   Space

Function Inverses   Algebras   Rational Numbers

Function Composites   Injective Functions   Surjective Functions   Operations   Integer Numbers

Equivalence Relations   Functions

Relations   Zero

Ordered Pairs   Natural Numbers   Equation Solutions

Unordered Pairs   Empty Set   Set Intersections   Set Unions

Set Specification   Equations

Set Inclusion

Sentences   Set Equality

Sets   Identity

Objects