Definition

Suppose W is a subspace of a vector space V. The *codimension* of W *in* V is the difference of the dimension of V and the dimension of W. In this context, V is called the *ambient space* of W.

Notation

As usual, let $\dim W$ and $\dim V$ denote the dimensions of W and V, respectively We denote the codomension of W in V by $\mathrm{codim}(W)$

Subspace Codimensions
Subspace Dimensions
Vector Space Dimensions
Vector Space Bases
Span
Linearly Dependent Vectors
Subspaces
Real Subspaces
Real Vector Span
Linear Combinations
Real Linear Combinations
Vector
Real Vector
Space Vector
Plane Vector Sums and Differences
N-Dimensional Space
Plane Vector
Distance
Space Distance
Plane Distance
Interval Length
Intervals
Real Space
Real Plane
Real Line
Real Order
Integral Line
Rational Order
Real Numbers
Geometry
Fields
Rational Numbers
Rings
Natural Fractions
Integer Arithmetic
Lists
Direct Products
Set Numbers
Finite Sets
Equivalent Sets
Integer Products
Natural Multiplicative Identity
Natural Additive Identity
Family Unions and Intersections
Function Inverses
Comparisons
Integer Order
Integer Sums
Natural Arithmetic
Identity Elements
Families
Function Images
Function Composites
Functions
Natural Order
Equivalence Relation
Orders
Integer Numbers
Concrete Relations
Natural Sums
Natural Products
Natural Powers
Operations
Relation
Recursion Theorem
Peano's Axioms
Ordered Pair Projections
Natural Induction
Set Products
Natural Numbers
Set Powers
Generalized Set Dualities
Set Unions and Intersections
Set Dualities
Intersection of Empty Set
Partition
Successor Sets
Unordered Triples
Set Symmetric Difference
Ordered Pairs
Set Intersection
Pair Unions
Set Complements
Pair Intersections
Set Unions
Set Differences
Empty Set
Unordered Pairs
Set Specification
Set Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects