Why

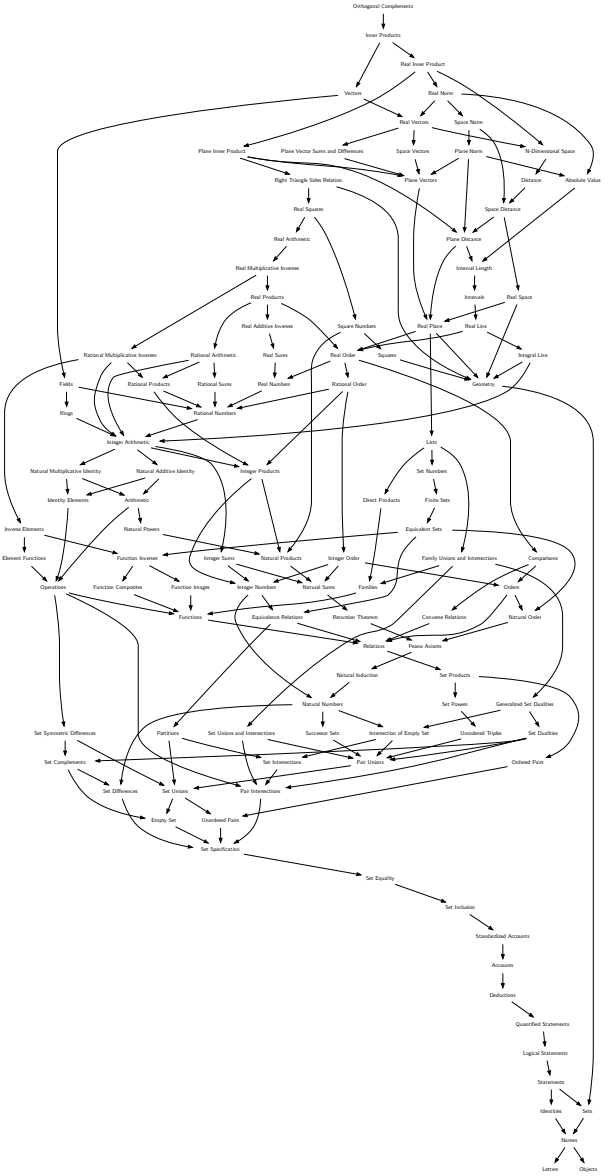
TODO

Definition

The *orthogonal complement* of a subset of an inner product space is the set of vectors which are orthogonal to every vector in the subset.

Notation

Let $(V, \mathbf{F})$ be a vector space and $U \subset V$. We denote the orthogonal complement of U by $U^{\perp}$.


Orthogonal Complements
Inner Products
Real Inner Product
Vectors
Real Norm
Real Vectors
Space Norm
Plane Inner Product
Plane Vector Sums and Differences
Space Vectors
Plane Norm
N-Dimensional Space
Right Triangle Sides Relation
Plane Vectors
Distance
Absolute Value
Real Squares
Space Distance
Real Arithmetic
Plane Distance
Real Multiplicative Inverses
Interval Length
Real Products
Intervals
Real Space
Real Additive Inverses
Square Numbers
Real Plane
Real Line
Rational Multiplicative Inverses
Rational Arithmetic
Real Sums
Real Order
Squares
Integral Line
Fields
Rational Products
Rational Sums
Real Numbers
Rational Order
Geometry
Rings
Rational Numbers
Integer Arithmetic
Lists
Natural Multiplicative Identity
Natural Additive Identity
Integer Products
Set Numbers
Identity Elements
Arithmetic
Direct Products
Finite Sets
Inverse Elements
Natural Powers
Equivalent Sets
Element Functions
Function Inverses
Integer Sums
Natural Products
Integer Order
Family Unions and Intersections
Comparisons
Operations
Function Composites
Function Images
Integer Numbers
Natural Sums
Families
Orders
Functions
Equivalence Relations
Recursion Theorem
Converse Relations
Natural Order
Relations
Peano Axioms
Natural Induction
Set Products
Natural Numbers
Set Powers
Generalized Set Dualities
Set Symmetric Differences
Partitions
Set Unions and Intersections
Successor Sets
Intersection of Empty Set
Unordered Triples
Set Dualities
Set Complements
Set Intersections
Pair Unions
Ordered Pairs
Set Differences
Set Unions
Pair Intersections
Empty Set
Unordered Pairs
Set Specification
Set Equality
Set Inclusion
Standardized Accounts
Accounts
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects