Why

Definition

An *affine transformation* is one which maps an affine combination of two vectors to the affine combination of their results under the same transformation.

Affine Transformations

Transformations

Vectors

Fields   N-Dimensional Space

Rational Numbers   Real Numbers   Space

Integer Arithmetic

Natural Additive Identity   Natural Multiplicative Identity   Groups

Identity Elements   Arithmetic   Algebras

Operations   Natural Exponents   Integer Products

Natural Products   Integer Numbers

Functions   Natural Sums

Equivalence Relations   Recursion Theorem

Relations   Peano Axioms

Cartesian Products   Natural Induction

Set Powers

Unordered Triples   Partitions   Successor Sets   Intersection of Empty Set   Natural Numbers

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

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