Why

Definition

The *translate* of a subset of a vector space *by* a given vector is the set of all vectors which are the sum of a vector in the subset with the given vector.

Notation

Let $(V, \mathbf{F})$ be a vector space. Let $M \subset V$ and $a \in V$. The translate of M by a is the set

$$\{x + a \mid x \in M\},$$

which we denote by $M + a$.

Translate Sets

Vectors

Fields   N-Dimensional Space

Groups   Real Numbers   Space

Algebras   Rational Numbers

Operations   Integer Numbers

Functions

Relations

Cartesian Products

Ordered Pairs   Set Powers

Unordered Triples   Zero

Pair Unions   Natural Numbers

Set Unions   Set Intersections

Unordered Pairs   Empty Set   Pair Intersections

Set Specification   Equation Solutions

Set Inclusion

Standardized Accounts

Definitions   Accounts

Quantified Statements   Deductions

Logical Statements

Statements

Sets   Identities

Names

Objects   Letters