◈ Convex Combinations

1   Why

2   Definition

A *convex combination* is a linear combination whose sequence of scalars is nonnegative and sums to one.

3   Characterization

Proposition 1. *A subset of $\mathbf{R}^n$ is convex if and only if it contains all the convex combinations of its elements.*

Convex Combinations

Linear Combinations

Conv

Vectors

Affine Sets

Fields

N-Dimensional Space

Inte

Groups

Space

Real Numbers

Rational Numbers

Integer Numbers

4