

AFFINE HULLS

Why

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Definition

The affine hull of a set in n-dimensional space is the intersection of the collection of affine sets which contain it.

Notation

We denote the affine hull of S by aff S.

Prop. 1. The affine hull of $S \subset \mathbb{R}^n$ consists of all vectors which can be expressed as

$$\lambda_1 x_1 + \lambda_2 x_2 \cdots + \lambda_m x_m$$

such that $x_i \in S$ and $\sum_i \lambda_i = 1$.

¹Future editions will include.

