



Why

Since every affine set is a translate of some (unique) subspace, it is natural to define the dimension of an affine set as the dimension of this subspace.

Definition

The *dimension* of a nonempty affine set is the dimension of the subspace parallel to it. By convention, \emptyset has dimension -1 . Naturally, the *points*, *lines* and *planes* are affine sets of dimension 0, 1, and 2 respectively.

