



Polytopes

1 Why

2 Definition

A *polytope* is the convex hull of a set of finitely many points.

An *m-dimensional simplex* is the convex hull of $m + 1$ affinely independent points; an *m-dimensional simplex* is a polytope. The points are called the *vertices* of the simplex.

When $m = 0, 1, 2, 3$ the simplex is a *point*, *closed line segment*, *triangle* or *tetrahedron*.