



Math for the people, by the people.

orthogonal vectors

Canonical name	OrthogonalVectors
Date of creation	2013-03-22 12:07:33
Last modified on	2013-03-22 12:07:33
Owner	akrowne (2)
Last modified by	akrowne (2)
Numerical id	8
Author	akrowne (2)
Entry type	Definition
Classification	msc 15-00
Related topic	GramSchmidtOrthogonalization

Two vectors,  $v_1$  and  $v_2$ , are orthogonal if and only if their inner product  $\langle x, y \rangle$  is 0. In two dimensions, orthogonal vectors are perpendicular (or in  $n$  dimensions in the plane defined by the two vectors.)

A set of vectors is orthogonal when, taken pairwise, any two vectors in the set are orthogonal.