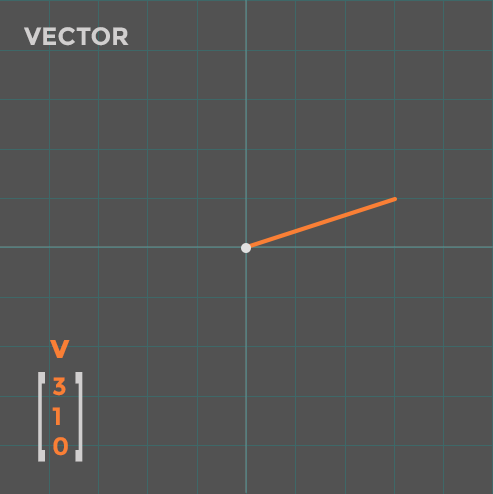
Scalar (Скаляр)

Just a simple number, ex.:

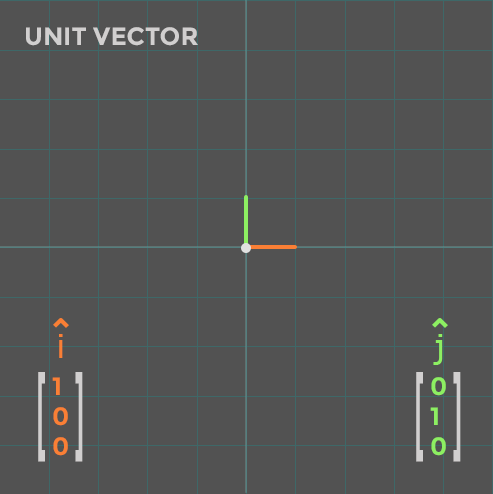
Vector (Вектор)

A set of numbers that can identify a point in space.



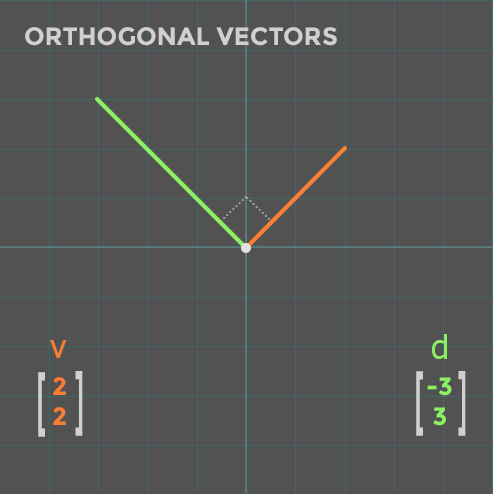
Unit Vector (Единичный вектор)

Unit vector is a vector with a unit norm (norm is a function that assigns positive length to a vector).



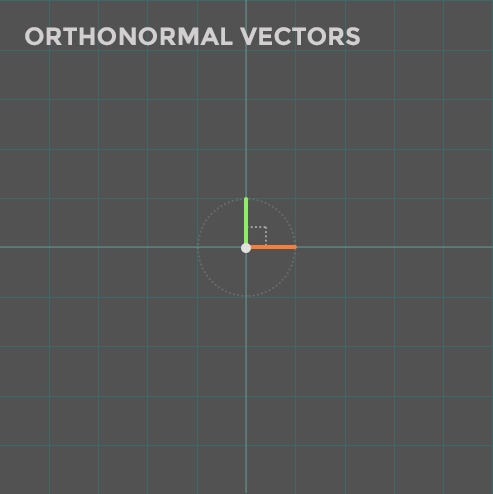
Orthogonal vectors (Ортогональные векторы)

Vector and vector are orthogonal (perpendicular) to each other if (their dot product equals 0). If both vectors have nonzero norm and their dot product equals 0, then they are perpendicular to each other.



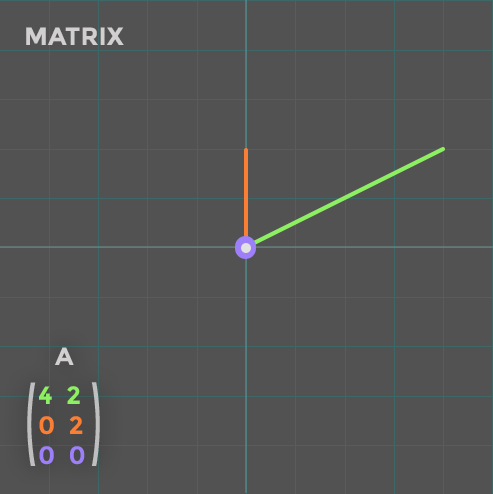
Orthonormal vectors (Ортонормированные векторы)

Vector and vector are orthonormal if they are orthogonal and have unit norm.



Matrix (Матрица)

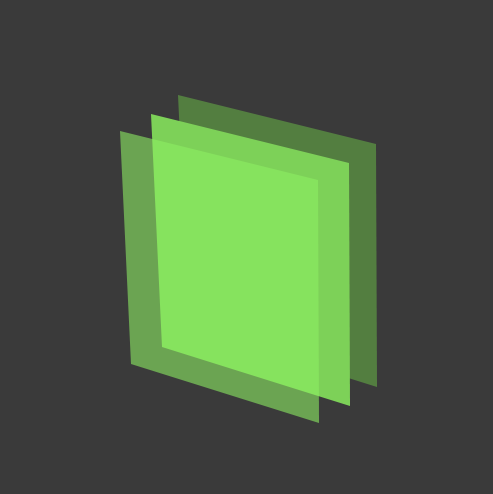
A matrix is a 2-D set of numbers size of m\*n. Ex.:



Tensor (Тензор)

An array of numbers arranged on a regular grid with a variable number of axes. Ex.: 3-D matrix:

**A**, elements –



Types of Vectors