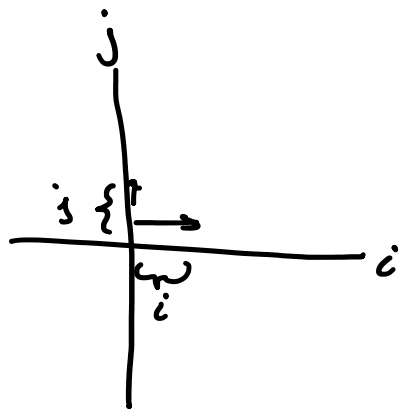
Linear Combos, Span Basis Vector

пятница, 29 марта 2019 г. 20:33

Basics $\vec{v}$ can be used to create the coordinate system.



Linear combination

adding scaled vectors.

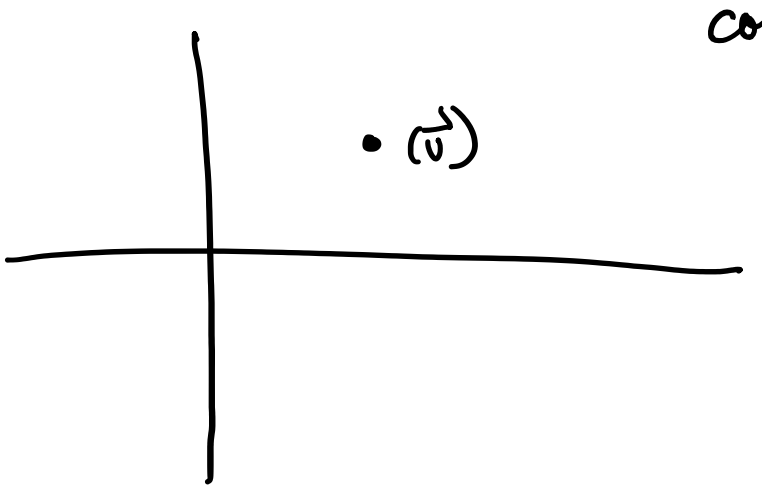
$$a\vec{v} + b\vec{d}$$

Span

the set of all vectors which can be reached using the basis vectors in all their linear combinations

Vectors vs. Points

Sometimes short form as point, when dealing with a collection of vectors.



Linear dependence -

when a vector $\vec{v}$ and vector $\vec{u}$ are linearly dependent. one vector is is a linear combination of the others.

$$\vec{u} = a \cdot \vec{v} + b\vec{w}$$

Technical definition of Basis.

Basies of a vector space is a set of linearly independent vectors that span the full space.