MATE 5150: Vector Spaces

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1 Objetivos de la class

- son 2 examenes
- hay una presentacion en grupo

1.1 topicos que se discutiran

2 Introduccion a espacios vectoriales

latex geometry examples

2.1 Parrallelogram Law for Vector Adidiotn

The sum of the vetors x and y that act at the same point P is the cextor veginning at P that is represented by the diagonal of parallelogram having x and y as adjaxen side

2.2 Examples 1.2

A real-valued function f defined on the real line is called an **even funciton** if $f(-t) = f(t)$ for each real number t. Prove that the set of even functions defined on the real line wiht the operations of addition and sxalar multiplication defined in Example 3 is a vector space.

$$(f+g)(t) = f(t) + g(t)$$
$$(cf)(t) = cf(t)$$

2.2.1 propeties

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$$d$$

2.3 Examples 1.3

Let V and W be vector spaces over a field F. Let

$$Z = \{(v, w) : v \in V \text{and } w \in W\}$$

2.4 Subspaces