

## SPACE NORM

## Why

We generalize our notion of norm from the plane,  $\mathsf{R}^2$ , the space,  $\mathsf{R}^3$ .

## **Definition**

The *norm* of a vector  $x \in \mathbb{R}^3$  is

$$||x|| = \sqrt{x_1^2 + x_2^2 + x_3^3}.$$

