

## PLANE VECTOR ANGLES

## Why

We talk about angles in the plane using the language of vectors.

## **Definition**

The angle (unsigned angle) between  $x \in \mathbb{R}^2$  and  $y \in \mathbb{R}^2$  is the real number

$$\theta = \angle(x, y) = \cos^{-1} \frac{x^{\top} y}{\|x\| \|y\|}$$

