



## PLANE VECTOR ANGLES

### Why

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

### Definition

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

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



