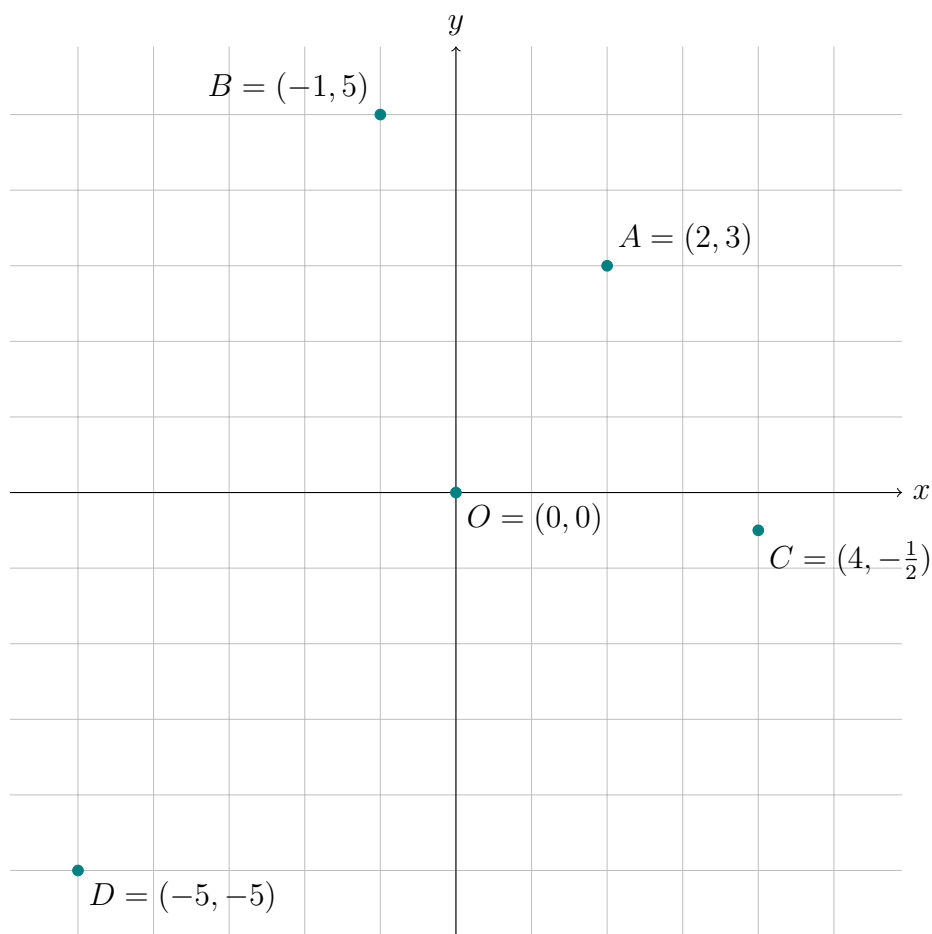


# Cartesian Plane: Plotting Points

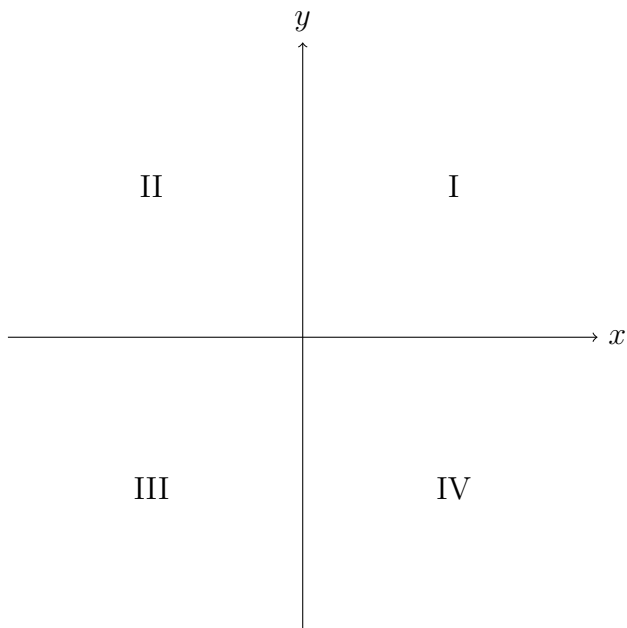
Video companion

## 1 Introduction

Cartesian plane denoted  $\mathbb{R}^2$



## 2 Axes and quadrants



$$x\text{-axis} = \{(x, y) \in \mathbb{R}^2 : y = 0\}$$

$$y\text{-axis} = \{(x, y) \in \mathbb{R}^2 : x = 0\}$$

$$\text{first quadrant} = \{(x, y) \in \mathbb{R}^2 : x > 0, y > 0\}$$

$$\text{second quadrant} = \{(x, y) \in \mathbb{R}^2 : x < 0, y > 0\}$$

$$\text{third quadrant} = \{(x, y) \in \mathbb{R}^2 : \quad \quad \quad \}$$

$$\text{fourth quadrant} = \{(x, y) \in \mathbb{R}^2 : \quad \quad \quad \}$$

### 3 Real-world example

Table of height and weight:

	$h$ (cm)	$w$ (kg)
A	177	88.3
B	164	74.7

