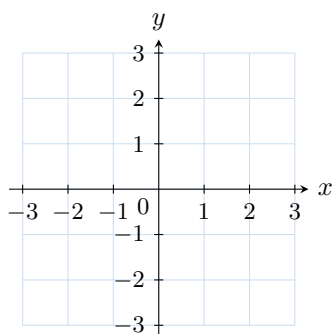


COORDINATE GEOMETRY

A COORDINATE PLANE

Definition Coordinate Plane

A **coordinate plane** is a grid formed by two number lines that intersect at their zero point, called the **origin**.



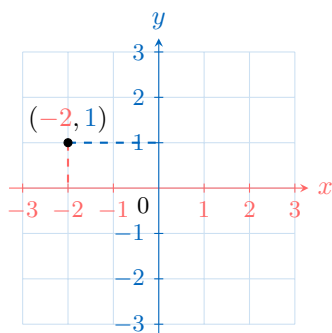
Coordinate plane

- The horizontal number line is called the **x-axis**.
- The vertical number line is called the **y-axis**.

Definition Coordinates of a Point

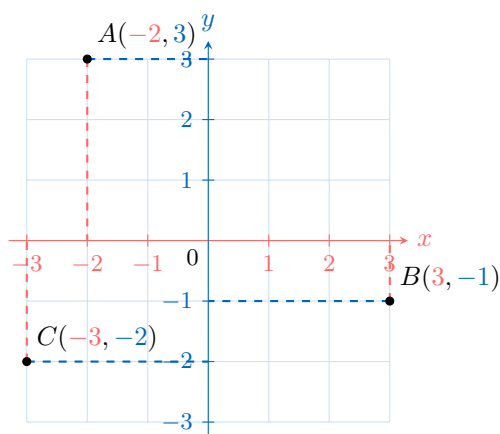
The **coordinates of a point** are a pair of numbers, written as (x, y) , where:

- The **x-coordinate** indicates the horizontal position along the x-axis, with positive numbers to the right of the origin and negative numbers to the left.
- The **y-coordinate** indicates the vertical position along the y-axis, with positive numbers above the origin and negative numbers below.



Ex: Plot these points on a coordinate plane:

$A(-2, 3)$, $B(3, -1)$, and $C(-3, -2)$



B TABLE OF POINTS

Definition Table of Points

A **table of points** lists the coordinates of points in a coordinate plane.

- The first row represents the **x-coordinates**.
- The second row represents the **y-coordinates**.

Ex:

x	-2	1	2
y	-3	3	-1

This table represents the points $(-2, -3)$, $(1, 3)$, $(2, -1)$ on the coordinate plane:

