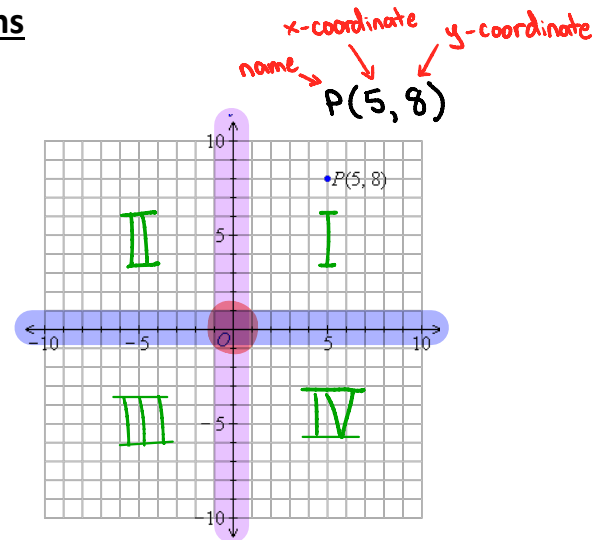


## Introduction to Relations

### The Cartesian Plane

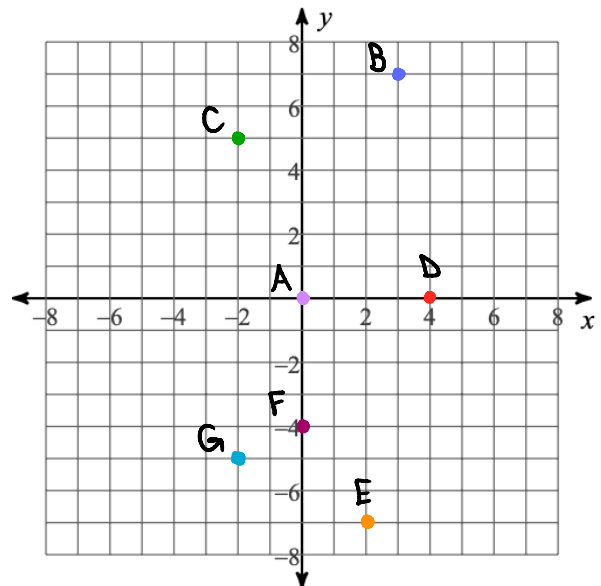
The Cartesian Plane was invented by René Descartes and consists of the following:

- 1) A horizontal or x-axis
- 2) A vertical or y-axis
- 3) The origin where the axes meet  $(0,0)$
- 4) Four quadrants
- 5) Numbered axes
  - positive numbers go to the right and up
  - negative numbers go to the left and down



**Example 1:** Plot the following points and describe the location of the point.

Point $(x,y)$	Location
$A(0,0)$	origin
$B(3,7)$	QI
$C(-2,5)$	QII
$D(4,0)$	x-axis
$E(2,-7)$	QIV
$F(0,-4)$	y-axis
$G(-3,-5)$	QIII



**Example 2:** Determine the coordinate of the points and the location of the points.

Point	Co-ordinate	Location
A	$(-1,-4)$	QIII
B	$(0,0)$	origin
C	$(-6,3)$	QII
D	$(6,4)$	QI
E	$(2,-2)$	QIV
F	$(-3,-5)$	QIII

