### 4.1 Cartesian Plane and Ordered Pairs

The Cartesian Plane is a grid used to graph points.


It is divided into 4 quadrants as shown

Origin: the point in the middle of the graph. Coordinates: $(0,0)$


Ordered Pairs: any point on the graph is represented by an ordered pair


## How to plot a point:



For example: to plot the point $(5,7)$

- start at the origin ( 0,0 )
- go 5 units to the right (along the $x$-axis)
- go 7 units up

Now plot the points $(-2,4),(-3,-7) \&(5,-6)$

## Graphing Requirements

- title, labels, units
- scales can be different on $x$ and $y$
- arrows on axis
- use a ruler
- do not crowd your work



Ex. 1 Determine the coordinates of points $A, B, C, D, E$ and $F$.

$$
\begin{aligned}
& A(0,1) \\
& B(1,0) \\
& C(5,1) \\
& D(-3,-1) \\
& E(4,-3) \\
& F(-3,6)
\end{aligned}
$$

