1.2.19

AI25BTECH11013-Gautham

Question:
In which quadrant or on which axis do each of the points $(-2,4)$, $(3,-1)$, $(-1,0)$, $(1,2)$ and $(-3,-5)$ lie? Verify your answer by locating them on the Cartesian plane?

Solution:
If x=0 then the point (x,y) lies on y-axis.
If y=0 then the point (x,y) lies on x-axis.
If $x>0, y>0$ then the point (x,y) lies in 1^{st} quadrant.
If $x<0, y>0$ then the point (x,y) lies in 2^{nd} quadrant.
If $x<0, y<0$ then the point (x,y) lies in 3^{rd} quadrant.
If $x>0, y<0$ then the point (x,y) lies in 4^{th} quadrant.
We can infer that $(-2,4)$ lies in 2^{nd} quadrant as .
Similarly $(3,-1)$,$(-1,0)$,$(1,2)$,$(-3,-5)$ lie on 4^{th}quadrant,x-axis,1^{st} quadrant,3^{rd} quadrant respectively .
This can also be verified from the graph below ,