EE24BTECH11036 - Krishna Patil

Ouestion:

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.

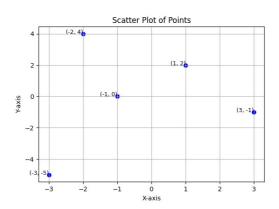
Solution:

To determine if point lies in a quadrant , we look at the the signs of the x and y coordinates.

| sign of x coordinate | sign of y coordinate | quadrant or axis |
|----------------------|----------------------|------------------|
| + | + | first |
| _ | + | second |
| _ | _ | third |
| + | _ | fourth |
| any | 0 | x-axis |
| 0 | any | y-axis |

TABLE 0: Quadrant Decider

- 1) A = (-2,4) lies in second quadrant.
- 2) $\mathbf{B} = (3,-1)$ lies in fourth quadrant.
- 3) $\mathbf{C} = (-1,0)$ lies on the x axis.
- 4) $\mathbf{D} = (1,2)$ lies in the first quadrant.
- 5) $\mathbf{E} = (-3, -5)$ lies in the third quadrant.



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