

EXERCISE 3.2

Write whether the following statements are True or False? Justify your answer.

(i) Point (3, 0) lies in the first quadrant.

(ii) Points (1, -1) and (-1, 1) lie in the same quadrant.

(iii) The coordinates of a point whose ordinate is $-\frac{1}{2}$ and abscissa is 1 are $-\frac{1}{2}, 1$.

(iv) A point lies on y -axis at a distance of 2 units from the x -axis. Its coordinates are (2, 0).

(v) (-1, 7) is a point in the II quadrant.

Solution:

(i) Point (3, 0) lies in the first quadrant.

False

Justification:

The ordinate of the point (3, 0) is zero.

Hence, the point lies on the x -axis

(ii) Points (1, -1) and (-1, 1) lie in the same quadrant.

False

Justification:

(1, -1) lies in IV quadrant

(-1, 1) lies in II quadrant.

(iii) The coordinates of a point whose ordinate is $-\frac{1}{2}$ and abscissa is 1 are $-\frac{1}{2}, 1$.

False

Justification:

The coordinates of a point whose ordinate is $-\frac{1}{2}$ and abscissa is 1 is (1, -1/2).

(iv) A point lies on y -axis at a distance of 2 units from the x -axis. Its coordinates are (2, 0).

False

Justification:

A point lies on y -axis at a distance of 2 units from the x -axis. Its coordinates are (0, 2).

(v) (-1, 7) is a point in the II quadrant.

True

Justification:

(-1, 7) is a point in the II quadrant.