CHAPTER 3 COORDINATE GEOMETRY

EXERCISE 3.2 PAGE:52

1. Write the answer to each of the following questions.

(i) What is the name of the horizontal and vertical lines drawn to determine the position of any point in the Cartesian plane?

(ii) What is the name of each part of the plane formed by these two lines?

(iii) Write the name of the point where these two lines intersect.

Solution:

(i) The name of horizontal and vertical lines drawn to determine the position of any point in the Cartesian plane is the x-axis and the y-axis, respectively.

(ii) The name of each part of the plane formed by these two lines, the x-axis and the y-axis, is quadrants.

(iii) The point where these two lines intersect is called the origin.

2. See Fig.3.14, and write the following.

i. The coordinates of B.

ii. The coordinates of C.

iii. The point identified by the coordinates (−3, −5).

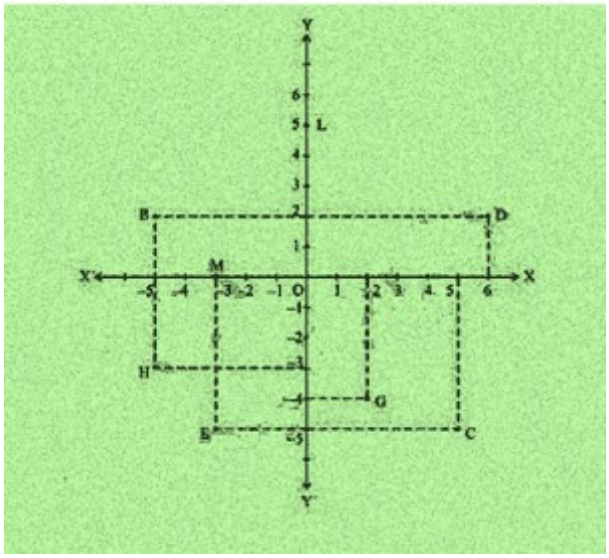
iv. The point identified by the coordinates (2, – 4).

v. The abscissa of the point D.

vi. The ordinate of the point H.

vii. The coordinates of the point L.

viii. The coordinates of the point M.



Solution:

i. The coordinates of B are (-5, 2).

ii. The coordinates of C are (5, -5).

iii. The point identified by the coordinates (-3, -5) is E.

iv. The point identified by the coordinates (2, -4) is G.

v. Abscissa means x coordinate of point D. So, abscissa of point D is 6.

vi. Ordinate means y coordinate of point H. So, the ordinate of point H is -3.

vii. The coordinates of point L are (0, 5).

viii. The coordinates of point M are (-3, 0).