

NCERT Solutions for Class 9 Maths Chapter 3 Coordinate Geometry

Ex 3.1

Question 1:

How will you describe the position of a table lamp on your study table to another person?

Solution.

In order to describe the position of a table lamp on the study table, we will take two lines, a perpendicular and horizontal assuming the table as a plane and taking perpendicular line as Y axis and horizontal as X axis. Now, take one corner of table as origin where both X and Y axis intersect each other. Then, the length of table Y axis and breadth is X axis from the origin.

Join the line to the lamp and mark a point. Calculate the distance of this point from both X and Y axis and then write it in the form of coordinates.

Let the distance of point from X axis is x and from Y axis is y then the position of the table lamp in terms of coordinates is (x, y)

Question 2.

(Street Plan): A city has two main roads which cross each other at the centre of the city. These two roads are along the North-South direction and East-West direction. Rene Descartes (1596 -1650)

All the other streets of the city run parallel to these roads and are 200 m apart. There are about 5 streets in each direction. Using $1\text{cm} = 200\text{ m}$, draw a model of the city on your notebook. Represent the roads/streets by single lines.

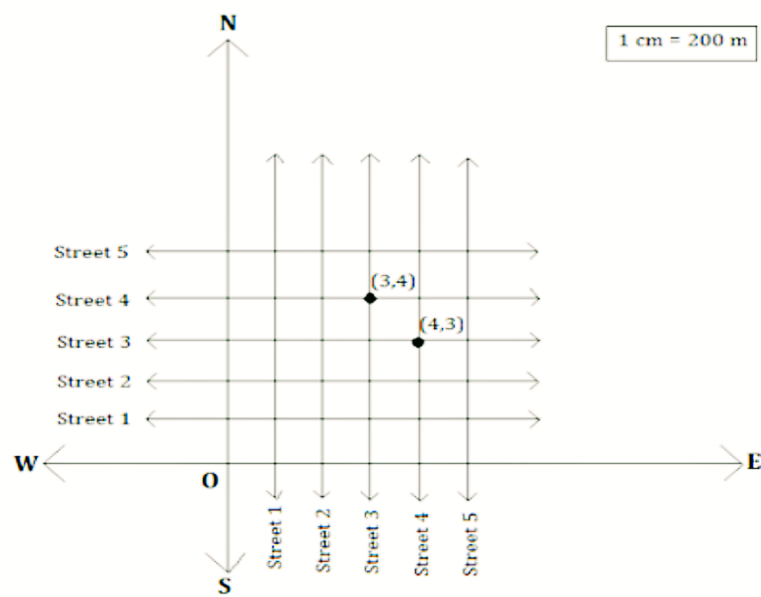
There are many cross- streets in your model. A particular cross-street is made by two streets, one running in the North - South direction and another in the East – West direction. Each cross street is referred to in the following manner: If the 2nd street running in the North - South direction and 5th in the East - West direction meets at some crossing, then we will call this cross-street (2, 5). Using this convention, find:

(i) How many cross - streets can be referred to as (4, 3).

(ii) How many cross - streets can be referred to as (3, 4)

Solution.

(i) As we see from the figure only and only one street can be referred to as (4, 3)



(ii) As we see from the figure only one street can be referred to as (3, 4)