

# GOVT DEGREE COLLEGE-ETURNAGARAM

## DEPT OF MATHEMATICS

### JIGNASA STUDENT SYUDY PROJECT

## COORDINATE GEOMETRY

### Synopsis

.Coordinate geometry (or analytic geometry) is defined as the study of geometry using the coordinate points.

.Using coordinate geometry, it is possible to find the distance between two points, dividing lines in  $m:n$  ratio, finding the mid-point of a line, calculating the area of a triangle in the Cartesian plane, etc.

A cartesian plane is defined as a plane that is formed by the intersection of two perpendicular coordinate axes.

The X-axis and Y-axis split the plane into four parts, and they are called quadrants.

For the Cartesian Coordinate system in 1-D, draw a straight line and choose a point O as the origin in the middle of the line.

Two-dimensional surface that extends indefinitely. A plane is the two-dimensional analogue of a point (zero dimensions), a line (one dimension) and three-dimensional space.

1. The 3D cartesian plane has one more axes perpendicular to the normal cartesian plane.

### USES OF COORDINATE GEOMETRY:

1. DIGITAL WORLD:

2. LOCATION OF AIR TRANSPORT

3. MAP PROJECTIONS

4. GPS:

### APPLICATIONS

1. It is used to figure out how far two points are apart.

2. It is used to calculate the dividing line ratio in the m:n ratio.

3. It is used to find the lines mid point.

4.It is used to figure out how big a triangle in the Cartesian plane is.

5.Even a computer monitor employes some basic coordinatr geometry concepts.

### COMMON JOBS THAT REGULARLY USE GEOMETRY TO COMPLETE THEIR RESPONSIBILITIES INCLUDE:

1.Construction worker

2.Mathematics Teacher

3.Interior Designer

4.CAD Engineer

5.Plumber

6.Animator

7.Fashion Designer.

### CONCLUSION

THE COORDINATE GRID OR COORDINATE PLANE IS A USEFULL INVENTION WHICH HAS MANY

APPLICATIONS ESPECIALLY AS U DO MORE ALGEBRA  
AND GEOMETRY.

COORDINATE GEOMETRY IS USED TO DAY TO DAY  
LIFE.SO IT IS VERY HELPFUL.