

## Introduction to Graphs

### Line graph:

A line graph represents data that changes continuously with time.

### Procedure to solve line graph with example:

#### Example:

The following table shows the runs scored by a team in a 20-over cricket match. Draw a line graph to represent the data.

<b>Number of overs</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>
<b>Runs</b>	<b>10</b>	<b>40</b>	<b>120</b>	<b>160</b>

#### Solution:

To draw a line graph of the given data, follow the steps given below.

- i. Draw OX, the X-axis and OY, the Y-axis on the graph paper.
- ii. Represent the number of overs on the X-axis, and the number of runs scored on the Y-axis.
- iii. Choose a suitable scale such as 1 c.m = 1 over on the X-axis and 1 c.m = 10 runs on the Y-axis.
- iv. Plot the points (5 , 10), (10 , 40), (15 , 120) and (20 , 160) on the graph.
- v. Join the points by straight lines to get the required “line graph”.

