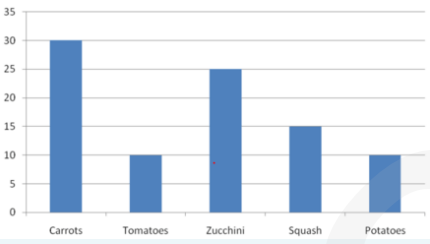
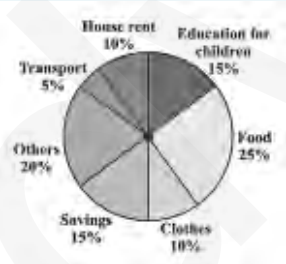
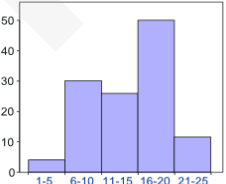
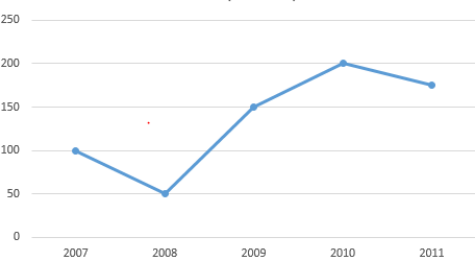




# Class 8

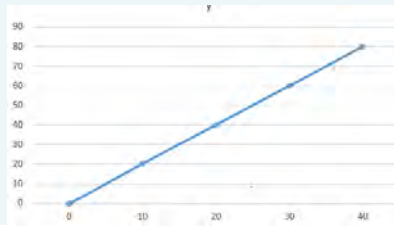
## Important Formulas

### Chapter 13 - Introduction to Graph's

| S.n                    | Term       | Description  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
|------------------------|------------|--|----------|------------|------------|-----|------------------------|-----|----------|-----|---------|-----|----------|-----|--------|-----|
| 1                      | Graph      | Graphs are visual representations of data collected  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2                      | Bar Graph  | A <b>bar graph</b> is used to show comparison among categories<br> <table border="1"><caption>Bar Graph Data</caption><thead><tr><th>Category</th><th>Value</th></tr></thead><tbody><tr><td>Carrots</td><td>30</td></tr><tr><td>Tomatoes</td><td>10</td></tr><tr><td>Zucchini</td><td>25</td></tr><tr><td>Squash</td><td>15</td></tr><tr><td>Potatoes</td><td>10</td></tr></tbody></table>  | Category | Value      | Carrots    | 30  | Tomatoes               | 10  | Zucchini | 25  | Squash  | 15  | Potatoes | 10  |        |     |
| Category               | Value      |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Carrots                | 30         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Tomatoes               | 10         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Zucchini               | 25         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Squash                 | 15         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Potatoes               | 10         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 3                      | Pie Chart  | A circle graph shows the relationship between a whole and its part<br> <table border="1"><caption>Pie Chart Data</caption><thead><tr><th>Category</th><th>Percentage</th></tr></thead><tbody><tr><td>House rent</td><td>10%</td></tr><tr><td>Education for children</td><td>15%</td></tr><tr><td>Food</td><td>25%</td></tr><tr><td>Savings</td><td>15%</td></tr><tr><td>Clothes</td><td>10%</td></tr><tr><td>Others</td><td>20%</td></tr></tbody></table> | Category | Percentage | House rent | 10% | Education for children | 15% | Food     | 25% | Savings | 15% | Clothes  | 10% | Others | 20% |
| Category               | Percentage |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| House rent             | 10%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Education for children | 15%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Food                   | 25%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Savings                | 15%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Clothes                | 10%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| Others                 | 20%        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 4                      | Histograms | A Histogram is a bar graph that shows data in intervals. It has adjacent bars over the intervals<br> <table border="1"><caption>Histogram Data</caption><thead><tr><th>Interval</th><th>Frequency</th></tr></thead><tbody><tr><td>1-5</td><td>5</td></tr><tr><td>6-10</td><td>30</td></tr><tr><td>11-15</td><td>25</td></tr><tr><td>16-20</td><td>50</td></tr><tr><td>21-25</td><td>12</td></tr></tbody></table>  | Interval | Frequency  | 1-5        | 5   | 6-10                   | 30  | 11-15    | 25  | 16-20   | 50  | 21-25    | 12  |        |     |
| Interval               | Frequency  |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 1-5                    | 5          |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 6-10                   | 30         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 11-15                  | 25         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 16-20                  | 50         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 21-25                  | 12         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 5                      | line graph | A <b>line graph</b> displays data that changes continuously over periods of time.<br> <table border="1"><caption>Line Graph Data</caption><thead><tr><th>Year</th><th>Value</th></tr></thead><tbody><tr><td>2007</td><td>100</td></tr><tr><td>2008</td><td>50</td></tr><tr><td>2009</td><td>150</td></tr><tr><td>2010</td><td>200</td></tr><tr><td>2011</td><td>180</td></tr></tbody></table>  | Year     | Value      | 2007       | 100 | 2008                   | 50  | 2009     | 150 | 2010    | 200 | 2011     | 180 |        |     |
| Year                   | Value      |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2007                   | 100        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2008                   | 50         |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2009                   | 150        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2010                   | 200        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |
| 2011                   | 180        |  |          |            |            |     |                        |     |          |     |         |     |          |     |        |     |

6 linear graph.

A line graph which is a whole unbroken line is called a **linear graph**



### Cartesian system

The system of fixing a point with the help of two measurements, vertical and horizontal is known as Cartesian system

