Mean	$\frac{\text{Values added together}}{\text{Number of values}}$ *A measure of the typical value*
Median	8, 8, 9, 9, 10, 10, 11, 11, 12, 13, 13, 14 ↑ The middle value when sorted in order (or halfway between the middle two if there are an even number of values) *A measure of the typical value*
Lower Quartile	↓ 8, 8, 9, 9, 10, 10, 11, 11, 12, 13, 13, 14 The middle value of the lower half (half not including the median)
Upper Quartile	↓ 8, 8, 9, 9, 10, 10, 11, 11, 12, 13, 13, 14 The middle value of the upper half (half not including the median)
Range	8, 8, 9, 9, 10, 10, 11, 11, 12, 13, 13, 14 The largest value – smallest value *A measure of the spread of data*
Inter-Quartile Range (IQR)	↔ 8, 8, 9, 9, 10, 10, 11, 11, 12, 13, 13, 14, Upper quartile – Lower quartile *A measure of the spread of typical data*
Mode	The most common value (or values)

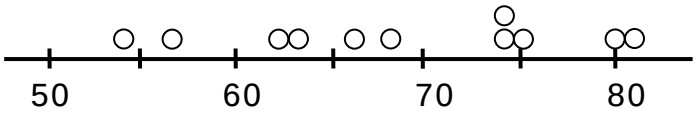
Stem and Leaf Plot

54, 74, 80, 63, 57, 66, 74, 62, 81, 75, 68

5	4, 7
6	2, 3, 6, 8
7	4, 4, 5
8	0, 1

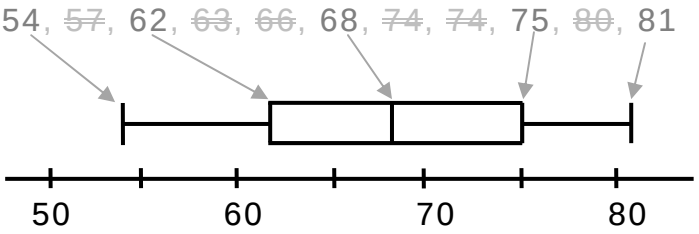
Dot Plot

54, 57, 62, 63, 66, 68, 74, 74, 75, 80, 81

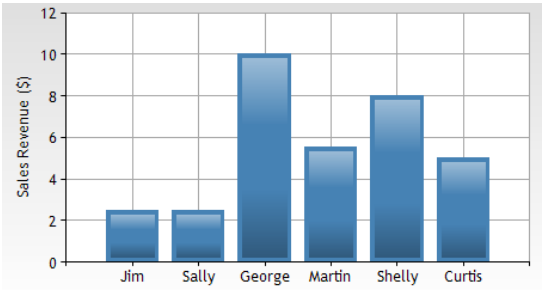


Box and Whisker Plot

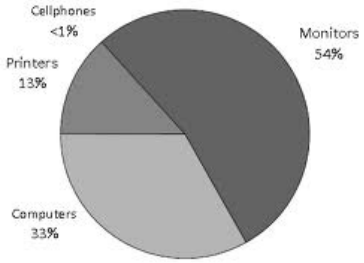
54, ~~57~~, 62, ~~63~~, ~~66~~, 68, ~~74~~, ~~74~~, 75, ~~80~~, 81



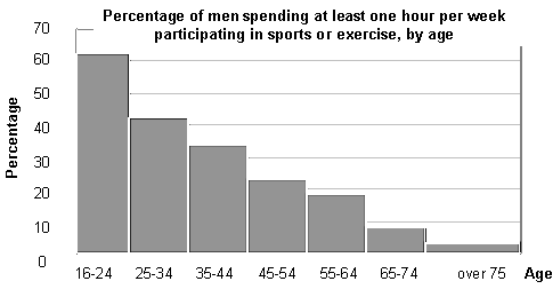
Bar Graph



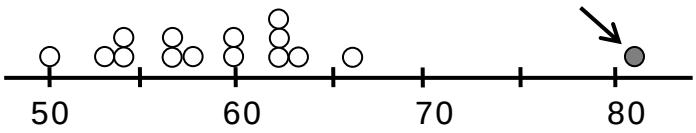
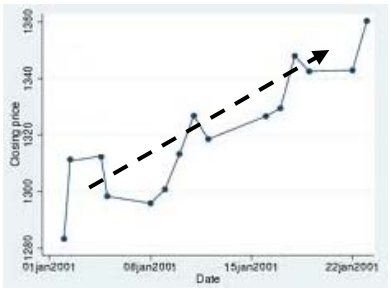
Pie Chart



Histogram



Line Graph

Outlier	A value that lies well away from most of the data 
Trend	 The general direction of the results, ignoring small wobbles
Data	A collection of facts, numbers, or information
Sample	A group of objects, individuals, or values selected from a population It should be randomly selected and representative
Census	A survey of the entire population
Population	**All** objects or individuals of interest
Survey	The process of collecting data from a sample It should try to avoid bias

Discrete	Data having exact values, often whole numbers
Continuous	Data having any value on a scale, including fractions of any units.
Maximum and **Minimum**	Largest and Smallest
Frequency Table	<table><tr><th>Value</th><th>Frequency</th></tr><tr><td>4</td><td>2</td></tr><tr><td>5</td><td>4</td></tr><tr><td>6</td><td>2</td></tr><tr><td>7</td><td>1</td></tr></table> = 4 ,4, 5, 5, 5, 5, 6, 6, 7
Tally Chart	<table><tr><th>Gender</th><th>Tally</th></tr><tr><td>Male</td><td>𝍸 𝍸 I</td></tr><tr><td>Female</td><td>𝍸 III</td></tr></table> = M,M,F,M,M,F,F,F,M,M,M,F,F,M,F,M,M,M,F
Bias	An influence that leads to results that do not correctly give the true value e.g. selecting a sample non-randomly, poor measuring, asking questions that expect a certain answer
Conclusion	The answer, with reasons given. There may be more than one possible conclusion from data.