

From where	Mode (Mo)	Median ( Md )	Mean ( $\bar{X}$ )= average	Weighted mean
Calculation	<ul style="list-style-type: none"> <li>- Most frequently</li> <li>- highest frequency</li> </ul>	<p>It is the middle value in ordered data (from the lowest to the highest values ).</p> <p>-Divided the observations into two halves .</p> <p><math>M = \frac{(n+1)}{2}</math> الجواب يكون موقع الرقم</p>	$\bar{X} = \frac{\sum X}{N}$ <p><math>\Sigma</math> = sigma =summation X = value of observation N = No. of observation</p>	$W \text{ mean} = \frac{W_1 X_1 + W_2 X_2 + W_3 X_3 + \dots + W_k X_k}{W_1 + W_2 + W_3 + \dots + W_k}$
Characteristics Advantages and Disadvantages	<p>1-Requires no calculation just counting</p> <p>2- It may not exist (No Mode)</p> <p>3-It is not necessarily be unique there may be one mode unimodal more than one mode in a set of data Bimodal, Tri modal ....</p> <p>▪ It is the only measure of central tendency that can be used for qualitative data</p> <p>4 -Mode is not practically useful with the metric continuous data (Disadvantages)</p>	<p>1- It is always existed</p> <p>2- It is always unique, there is one and only one Md .</p> <p>3- It is not affected by two extremes, not sensitive by two extremities .</p> <p>4- Not affected by skewness in the distribution or Not affected by presence of outliers</p> <p>5- It is discard a lot of information because it ignores most of the values apart from those in the center of distribution (Disadvantages)</p>	<p>1- Relatively easy to handle</p> <p>2- It is always exist</p> <p>3- It is always unique, there is one and only one Mean</p> <p>3- It takes into account every item in a set of data</p> <p>4- It uses all of the information in the data set.</p> <p>5- affected by skewness in the in the data set</p> <p>6- affected by presence of outliers</p> <p>7- it can not be used with the ordinal data</p> <p>8- It is affected by the two extremes by a very small or a very large value , It is sensitive to the extremes</p> <p>9- this may produce a mean that is not very representative of the general mass of data (disadvantage)</p> <p>10- it can not be used with the ordinal data ??? (ordinal data are not real numbers, so they cannot be added or divided ) (disadvantage)</p>	
Used for	<ul style="list-style-type: none"> <li>- Nominal</li> <li>- Ordinal</li> <li>- Discrete</li> </ul>	<ul style="list-style-type: none"> <li>- Ordinal</li> <li>- Continuous</li> <li>- Discrete</li> </ul>	<ul style="list-style-type: none"> <li>- Continuous</li> <li>- Discrete</li> </ul>	