

Mean	
Definition	The mean is the sum of the values, divided by the total number of values.
Equation	$X = \frac{x_1 + x_2 + x_3 + \dots + X}{n}$
Examples	<p>Example: The data show the number of patients in a sample of six hospitals who acquired an infection while hospitalized. Find the mean. 110, 76, 29, 38, 105, 31</p> <p>Solution: $X = \frac{110 + 76 + 29 + 38 + 105 + 31}{6} = 64.83$</p>

Median	
Definition	The median of a data set is the value that lies in the middle of the data when the data set is ordered .
Equation	<p>If n is odd the equation = $n + 1 / 2$</p> <p>If n is even the equation = $n/2 , n+1/2$</p>
Examples	<p>The number of children with asthma during a specific year in seven local districts is shown. Find the median. 253, 125, 328, 417, 201, 70, 90</p> <p>نرتب الاعداد في البدايه : 70, 90 , 125 , 201 , 253 , 328 , 417</p> <p>نلاحظ انه عدد الارقام المتواجده هي 7 ارقام وتعتبر عدد فردي فنستخدم المعادلة الفردية وناخذ العدد الي في النص = 201 Median = $7 + 1/2 = 4$</p> <p>نلاحظ انه مكان رقم 201 في السلسه هو 4</p> <p>Example: Six customers purchased these numbers of magazines: 1, 7, 3, 2, 5, 8, Find the median. Solution: 1, 2, 3 , 5 , 7, 8</p> <p>نلاحظ انه مجموعهم عدد زوجي وهو 6 ارقام موجوده MD = $6/2 , 6+1/2 = (3,3)$ -----> The median = $3+3/2 = 3$</p>

mode.	
Definition	The value that occurs most often in a data set is called the mode. The mode of a data set is the data entry that occurs with the greatest frequency
Examples	<p>The following data represent the duration (in days) of US space shuttle voyages for the years 1992-1994. Find the mode 8, 9, 9, 14, 8, 8, 8, 10, 7, 6, 9, 7, 8, 10, 14, 11, 8, 14, 11</p> <p>Solution: Arrange the data in order 6, 7, 7, 8, 8, 8, 8, 8, 9, 9 9 10, 10, 11, 11, 14, 14, 14 Since 8-day voyages occurred 5times – a frequency larger than any other number the mode for the data set is 8.</p> <p>Example: Find the mode for the number of coal employees per county for 10 selected counties in southwestern Pennsylvania. 110, 731, 1031, 84, 20, 118, 1162, 1977, 103, 752 Solution: Since each value occurs only once, there is no-mode.</p>

Midrange	
Definition	The Midrange is defined as the sum of the lowest and highest values in the data set, divided by 2. The symbol MR is used for the midrange
Equation	$MR = \frac{\text{Lowest value} + \text{Higher value}}{2}$
Examples	<p>Find the midrange of data for the NFL signing bonuses in previous Example. The bonuses in millions of dollars are 18, 14, 34, 11, 10, 12,</p> <p>: Arrange the data in order : 10 , 11 , 12 , 14 , 18 , 34</p> <p>MR = $\frac{34 + 10}{2} = 22$</p>

