|  |  |  |
| --- | --- | --- |
| **Term** | **Describe** | **Example** |
| **Box Plot** |  | c1u1sumgraph5 |
| **Dot Plot** |  |  |
| **Histogram** |  | histogram |
| **Median** |  | quartiles |
| **First and Third Quartiles**  |  | quartiles |
| **Interquartile** **Range**  |  | **Subtract** **Third Quartile () – First Quartile () = IQR** |
| **Outlier** |  | **y_x_LRout_plot** |
| **Mean** |  | **5 + 4 + 2 + 6 + 3 = 20**  **The Mean is 4.** |
| **Mean Absolute Deviation (MAD)** |  | Steps:1. Find the Mean
2. Calculate the absolute value of the difference between each data value and the mean
3. Determine the average of the differences in step 2. This average is the mean absolute deviation
 |
| **Measures of Center**  |  | Find the Mean and Median for the following data. ***Hint:*** (Must order the numbers first before finding the Median)2 1 5 4 3 **Mean**:  **Median** = 3 |
| **Measures of spread** |  | ***Examples of Measures of Spread:***1. Range
2. Interquartile Range (IQR)
3. Mean Absolute Deviation -MAD
 |
| **Bivariate Data** | * Involves 2 variables
* Causes/relationships
 | **Is there a relationship between the number of females in computer programming & their scores in mathematics?** |
| **Shape** | Shape of the distribution |   |

When you compare two or more data sets, focus on four features:

* **Center.** Graphically, the center of a distribution is the point where about half of the observations are on either side.
* **Spread**. The spread of a distribution refers to the variability of the data. If the observations cover a wide range, the spread is larger. If the observations are clustered around a single value, the spread is smaller.
* **Shape**. The shape of a distribution is described by symmetry, [skewness](http://stattrek.com/Help/Glossary.aspx?Target=Skewness), number of peaks, etc.
* **Unusual features**. Unusual features refer to gaps (areas of the distribution where there are no observations) and outliers.





