

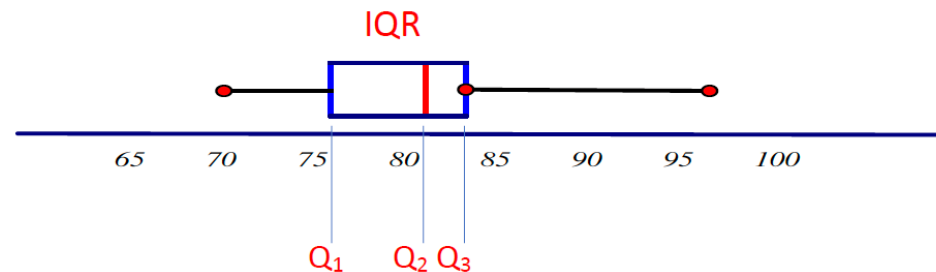
## Box & Whisker Plot

A Box and Whisker Plot (or Box) is a convenient way of visually and displaying the data distribution through their quartiles.

### Inter Quartile Range – IQR

The data in the box represent the **Inter Quartile Range** – the average, the middle 50%.

The difference between the upper and lower quartiles,  $(Q_3 - Q_1)$  is called the “interquartile range” (IQR).



## **Algorithm for Constructing a Box and Whisker Plot**

- (1) find the median of the entire set of data,**
- (2) find the medians for the top 50% and the bottom 50% to form the box**
- (3) make whiskers to the largest and smallest data points from the box**
- (4) check for outliers.**