

6.3: Box Plots

A box plot is a plot that shows Q_1 , Q_3 and MD ($= Q_2$) along with H and L ($= Q_0$ and Q_4) as shown in Figure 6.3. It especially emphasizes the IQR.

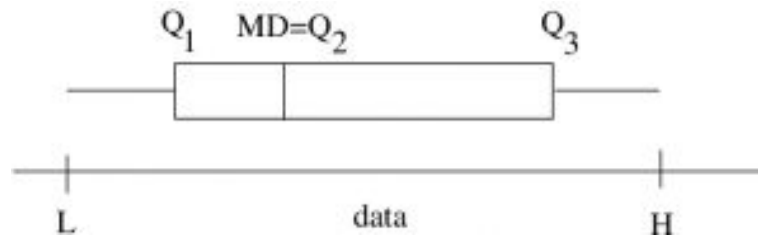


Figure 6.3: The features of a box plot, also known as a box-and-whiskers plot. When one of the whiskers is more than 1.5 times the length of the box (the IQR) then there are outliers by our definition in Section 6.2. The data line shown below the box plot is a construction line and not part of the box plot.

Example 6.5 : Construct a box plot for the data shown in Figure 6.4. Again, someone has done the first, tedious, step of *ordering* the data for us.

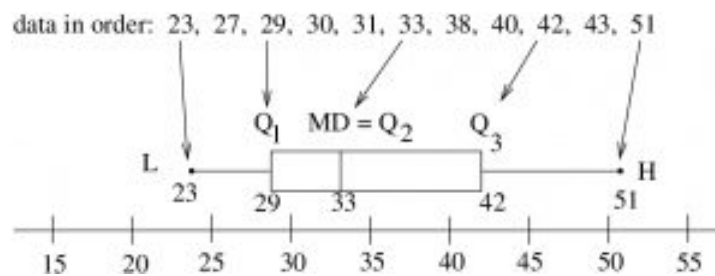


Figure 6.4: Construction of a box plot from the given data.

□

Box plots can also be drawn vertically. SPSS draws box plots vertically; this is especially useful for comparing datasets.

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