

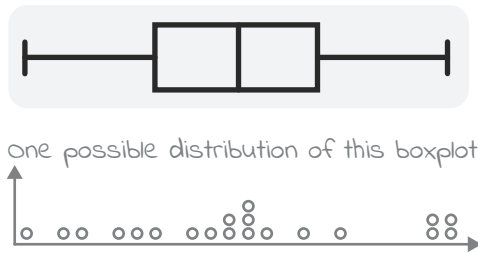


Boxplot

Visual Patterns

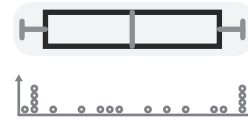
Balanced

If the box plot will look **symmetric**, the distribution will be **normal**, there are few exceptionally large or small values. The mean will be about the same as the median.

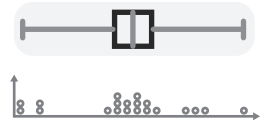


One possible distribution of this boxplot

Fat box

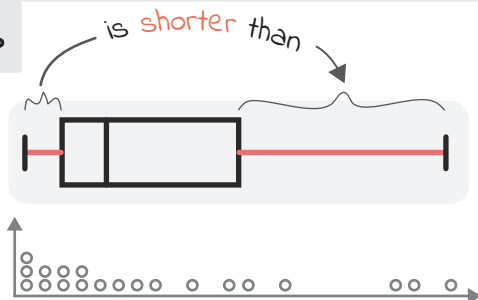


Thin box



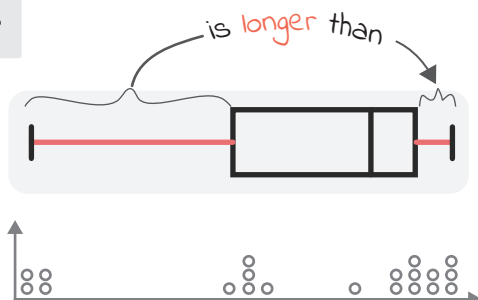
Positive Skewness

A distribution with a **positive skew** would have a **longer** whisker in the **positive** direction than in the **negative** direction.

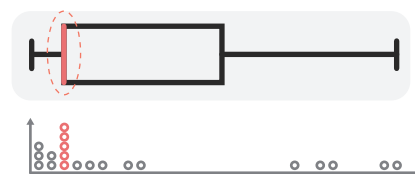


Negative Skewness

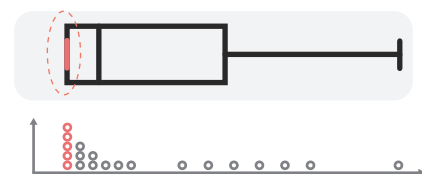
A distribution with a **negative skew** would have a **longer** whisker in the **negative** direction than in the **positive** direction.



Overlapping



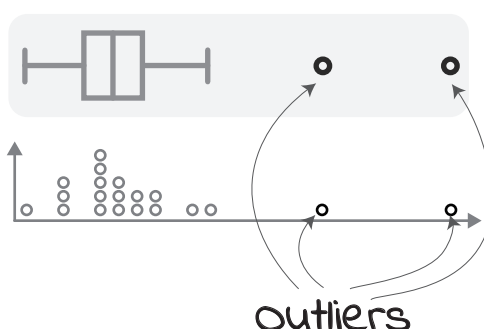
The lower quartile and the median are **overlapped**, this occurs when the **25%** of values are **same** between the lower quartile and the median.



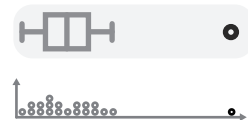
The minimum and the lower quartile are **overlapped**, this occurs when the **25%** of values are **same** between the minimum and the lower quartile.

Outlier(s)

When reviewing a boxplot, an outlier is defined as a data point that is located **outside the whiskers** of the boxplot (e.g. outside 1.5 times the interquartile range above the upper quartile and below the lower quartile).



The one-side outlier



The two-sides outlier

