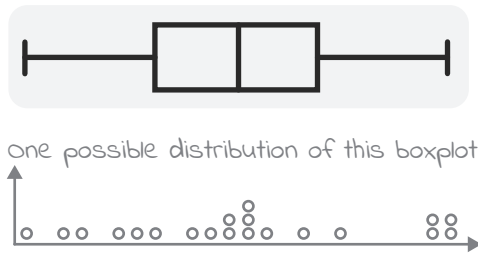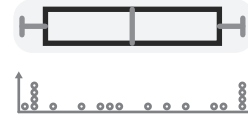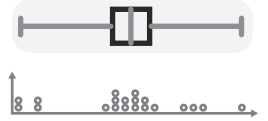# Boxplot — Visual Patterns

Ballanced

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.
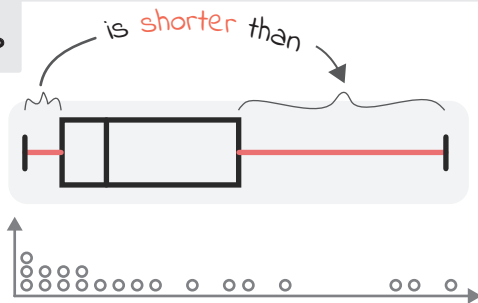

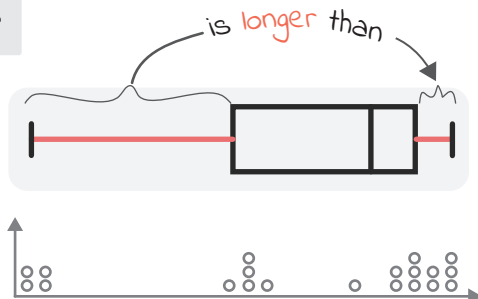One possible distribution of this boxplot

Fat box

Thin box

Possitive Skewness

is **shorter** than

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

Negative Skewness
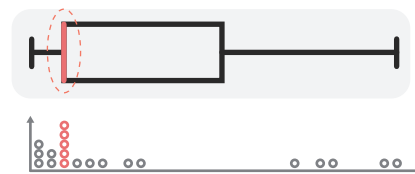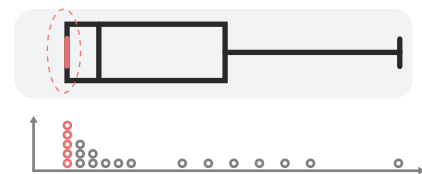
is **longer** than

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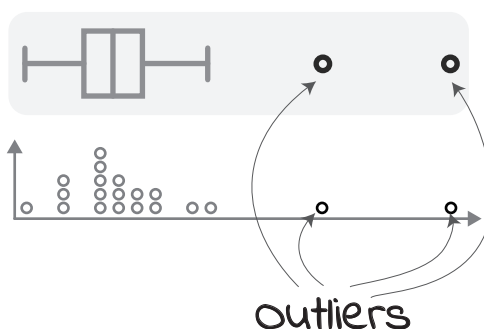

Overlapping

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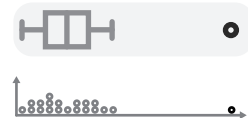
The minimum and the lower quartile are overlapped, this occurs when the **25%** of values are **same** between the minimum and the lower quartile.

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 bellow the lower quartile).

outliers

The one-side outlier

The two-sides outlier