

range

A measure of *dispersion* that is formed by subtracting the smallest element of a *sample* from the largest one:

$$\text{range}(x) = \max(x) - \min(x)$$

Example: the data set $x = \{1, 2, 3, 4, 5, 6\}$ has the maximum $\max(x) = 6$ and minimum $\min(x) = 1$, so its range is $6 - 1 = 5$.

The range is very sensitive to *outliers*. More robust measures of dispersion include the *interquartile range* and the *standard deviation*.