## Average

An average of a set of data gives an indication of the "centre" of the data.
An average of a random variable gives an indication of its "central value".
An average of a function gives an indication of its "central value".
There are several different averages in common use:

- The mode gives the most common value of a set of data, either for qualitative or quantitative data. It gives the most likely value of a random variable.
- The median gives the middle value of a set of (quantitative) data. For a random variable, the probability of being less than the median is 0.5 . (See the median entry for more details.)
- A mean is a calculation which gives a measure of a centre of (quantitative) data, a random variable or a function. There are several different kinds of mean; see the mean entry for more details.

These different averages each have advantages and disadvantages. For example, means can be significantly affected by outliers or extreme values, whereas the median is much less affected by such values.

