

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.