



[https://en.wikipedia.org/wiki/Standard\\_score](https://en.wikipedia.org/wiki/Standard_score)

# z-score (Standard Score)

In [statistics](#), the **z-score** (also known as the **standard score**) is the number of [standard deviations](#) that an observed value or data point falls above or below the [mean](#) value of what is being observed or measured.

Data values above the mean have **positive z-scores**, while data values below the mean have **negative z-scores**.

A **z-score** is calculated by subtracting the [population mean](#) from an individual [data value](#) and then dividing the difference by the [population standard deviation](#).

This process of converting a data value into a z-score is called **standardizing** or **normalizing** (however, "normalizing" can refer to many types of ratios).

**z-scores** are also called **standard scores**; the two terms may be used interchangeably, as they are in this article. Other terms include **z-values**, **normal scores**, and **standardized variables**.

NOTE: This article has been modified.