

standard deviation (σ , s , sd)

A measure of *dispersion* that is equal to the square root of the *variance*:

$$\sigma = \sqrt{\sigma^2} = \sqrt{\frac{1}{n} \sum (X - \mu)^2}$$

As with the variance, *Bessel's correction* is performed in the sd of a sample; it is defined as

$$s = \sqrt{s^2} = \sqrt{\frac{1}{n-1} \sum (x - \bar{x})^2}$$

The standard deviation plays a central role in the *normal distribution*. See also: *rule of three sigma*.