**standard deviation** \((\sigma, s, \text{sd})\)

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*. 