

Central momentum = n

@wikipedia

A set of [statistical metrics](#), characterizing the deviation of a given numerical [dataset](#) $x = \{x_1, x_2, x_3, \dots x_N\}$ from its [Mean Value](#) $\mu(x)$:

$$\mu_n = E[(x - \mu)^n] = \frac{1}{N} \sum_{i=1}^N (x_i - \mu)^n$$

where

N	dataset length
E	expectation operator
n	order of central momentum

The common assumption is that zero-th [central momentum](#) is unit-value: $\mu_0 \equiv 1$.

By definition the first [central momentum](#) is always zero: $\mu_1 \equiv 0$.

The [second central momentum](#) (μ_2) is also called [variance](#) $\mu_2 = \sigma^2$, where σ is [standard deviation](#).

The third [central momentum](#) is characterizing asymmetry of the [dataset](#) distribution $\mu_3 = \bar{\mu}_3 \cdot \sigma^3$, where $\bar{\mu}_3$ is [skewness](#).

See also

[Formal science](#) / [Mathematics](#) / [Statistics](#) / [Statistical Metric](#)