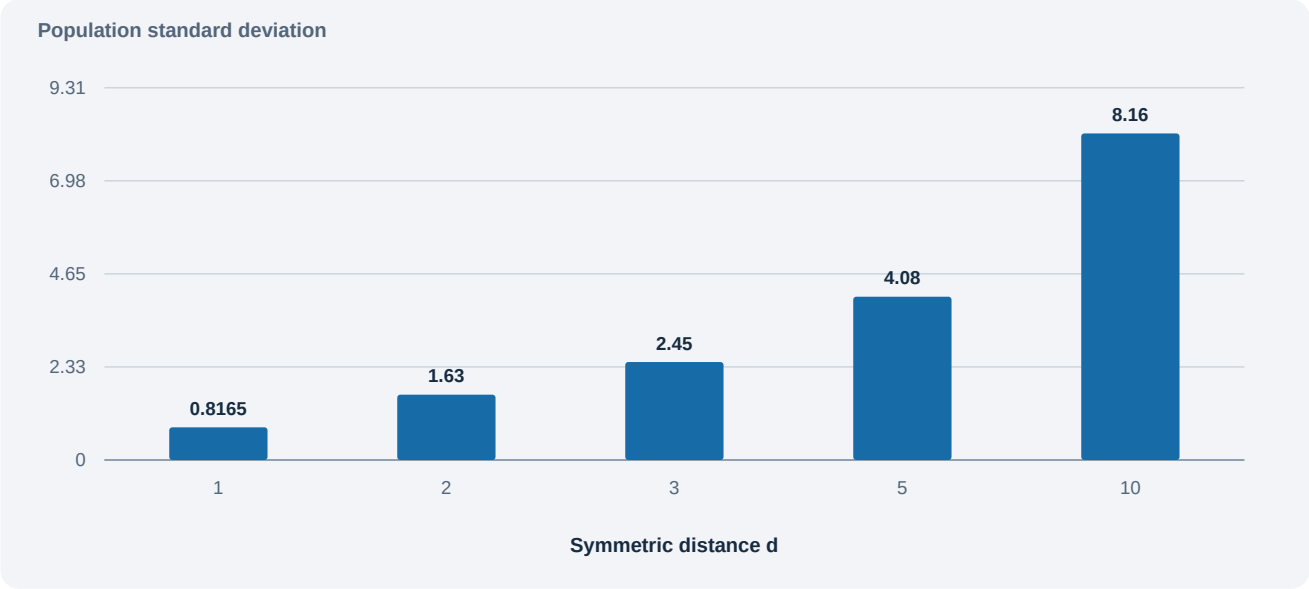
Population dispersion of closes

Price and indicators | Original synthetic example | Edition 2026-11-26

Population standard deviation measures the root mean squared distance of observations from their mean. Dividing by the full count is a stated descriptive convention, distinct from sample estimation.

FORMULA Population SD = sqrt(sum((price - mean)^2) / n)

SCENARIO 01: Three closes: 100-d, 100, 100+d



WORKED EXAMPLE

For closes 97, 100, 103, population SD is 2.45; the denominator is 3.

COMMON MISTAKE

Mixing population and sample denominators leads to different band values with the same data.

BEFORE YOU USE THE CALCULATION

1. Name the denominator convention.
2. Keep units in price.
3. Do not interpret close dispersion as a forecast distribution.

COMPARE TWO MORE INPUT SETS

Scenario 05: Three closes: 140-d, 140, 140+d. For closes 137, 140, 143, population SD is 2.45; the denominator is 3.

Scenario 10: Three closes: 190-d, 190, 190+d. For closes 187, 190, 193, population SD is 2.45; the denominator is 3.

Synthetic values are not historical market data. Educational material; trading can result in substantial losses.