Maximum drawdown along an equity path

Research and evaluation | Original synthetic example | Edition 2026-11-26

Maximum drawdown is the largest peak-to-later-trough decline in a specified equity path. Its value depends on sampling frequency and the inclusion of open-position mark-to-market changes.

FORMULA Drawdown at t = equity(t) / running peak(t) - 1

SCENARIO 01: Equity path includes a 5-unit decline from 115



WORKED EXAMPLE

The largest observed drawdown is 6.78% in this path. The peak must precede its trough.

COMMON MISTAKE

Using the highest and lowest values without respecting their time order can invent an impossible drawdown.

BEFORE YOU USE THE CALCULATION

1. Track the running peak chronologically.
2. Use a declared equity convention.
3. Report the sample period and granularity.

COMPARE TWO MORE INPUT SETS

Scenario 05: Equity path includes a 13-unit decline from 115. The largest observed drawdown is 11.3% in this path. The peak must precede its trough.

Scenario 10: Equity path includes a 23-unit decline from 115. The largest observed drawdown is 20% in this path. The peak must precede its trough.

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