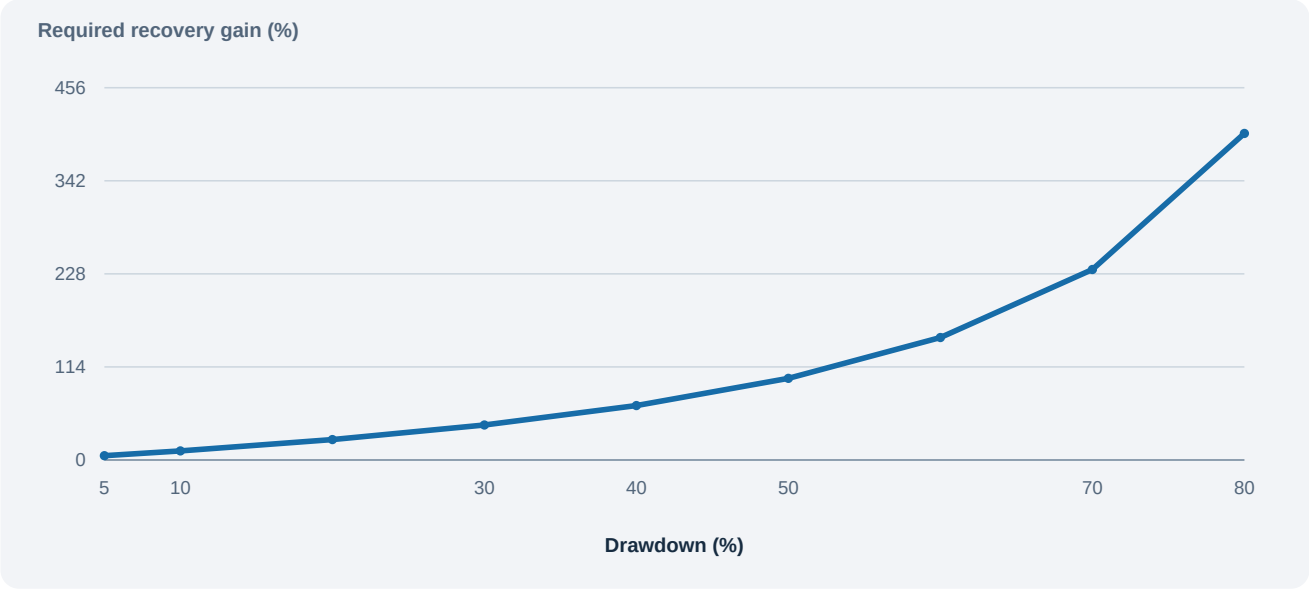
Gain required after a drawdown

Performance arithmetic | Original synthetic example | Edition 2026-11-26

A drawdown reduces the base on which a recovery gain is earned. The percentage gain needed to recover therefore exceeds the percentage loss whenever the loss is positive.

FORMULA Recovery fraction = drawdown / (1 - drawdown)

SCENARIO 01: Starting capital 10000; changing recovery base



WORKED EXAMPLE

A 20% loss leaves 8000; recovering to 10000 requires a 25% gain on that smaller balance.

COMMON MISTAKE

Assuming a 20 percent gain reverses a 20 percent loss uses different percentage bases.

BEFORE YOU USE THE CALCULATION

1. Express drawdown as a fraction.
2. Exclude a 100 percent loss from finite recovery.
3. Check the result against the original equity.

COMPARE TWO MORE INPUT SETS

Scenario 05: Starting capital 50000; changing recovery base. A 20% loss leaves 40,000; recovering to 50000 requires a 25% gain on that smaller balance.

Scenario 10: Starting capital 100000; changing recovery base. A 20% loss leaves 80,000; recovering to 100000 requires a 25% gain on that smaller balance.

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