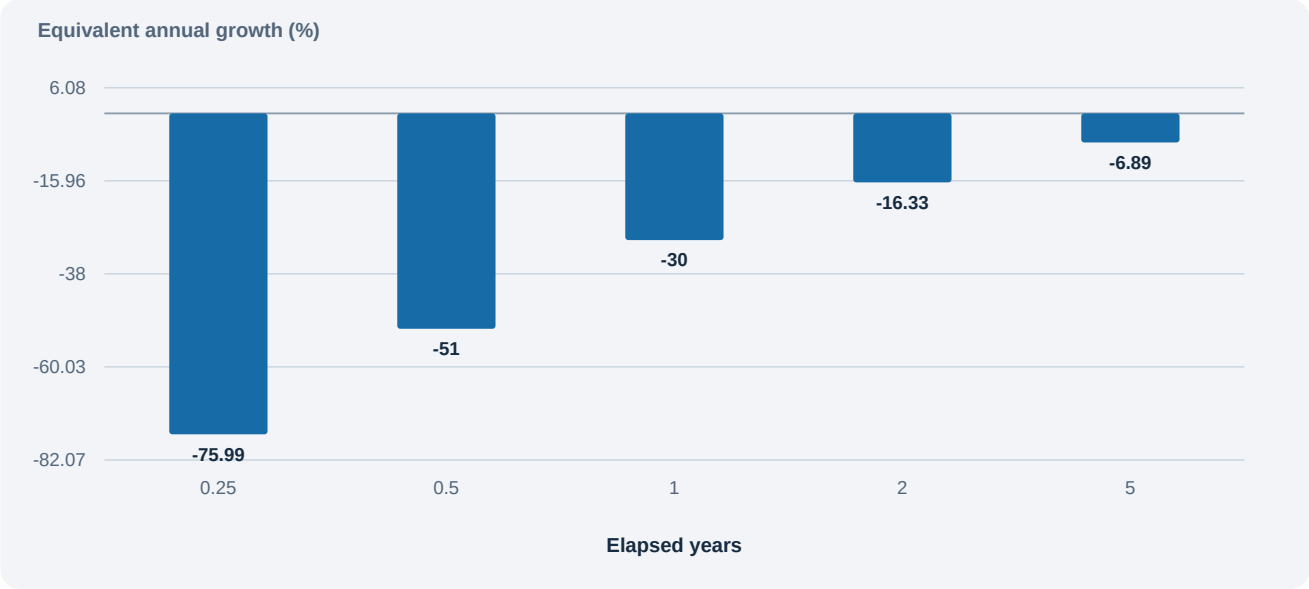
Annualizing a total return

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

Annualized growth converts a positive wealth ratio over a stated number of years into an equivalent constant yearly rate. It does not reproduce the path or the volatility of the investment.

FORMULA Annualized growth = (ending / starting)^(1/years) - 1

SCENARIO 01: Ending / starting wealth ratio 0.7; no cash flows



WORKED EXAMPLE

Over two years, ratio 0.7 annualizes to -16.33%. Short spans magnify the extrapolation.

COMMON MISTAKE

Annualizing a brief exceptional result can imply a repeatable pace that the sample does not establish.

BEFORE YOU USE THE CALCULATION

1. Use a valid positive wealth ratio.
2. State the elapsed-year convention.
3. Separate external cash flows.

COMPARE TWO MORE INPUT SETS

Scenario 05: Ending / starting wealth ratio 1.1; no cash flows. Over two years, ratio 1.1 annualizes to 4.88%. Short spans magnify the extrapolation.

Scenario 10: Ending / starting wealth ratio 2; no cash flows. Over two years, ratio 2 annualizes to 41.42%. Short spans magnify the extrapolation.

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