DRAWDOWN & THE LOSING STREAK

Vajgrt Labs - Education - Lesson 29 of 72 - 7 min read - Updated Oct 21, 2026

TL;DR

- A drawdown is the fall from a peak to the trough after it, and recovery is asymmetric: -19% needs +23.5% to heal, -50% needs +100%. The deeper the hole, the longer the ladder - in percentages, not feelings.

- The real episode: SPY closed at 612.93 on Feb 19, 2025 and at 496.48 on Apr 8, 2025 - -19.0% in 35 sessions. The $10,000 example account, fully invested, fell to $8,100; the same account only a quarter invested fell to $9,525. Position size, chosen in advance, was the entire difference.

- Losing streaks are scheduled, not cursed: a trader who wins 40% of trades has about a 38% chance of at least one 10-loss streak inside any 200 trades; a coin-flip trader, about 9%. Size is set so the streak is a bad month - not the end.

THE TAKEAWAYS

- The recovery table - pure arithmetic, worth pinning next to the screen: down 10% needs +11.1% to recover; down 20% needs +25.0%; down 25% needs +33.3%; down 30% needs +42.9%; down 50% needs +100%. Nothing in the table is an opinion. Every sizing decision in this course is made in sight of it, because a trader who has to earn +100% to get home does not, in any practical sense, get home.

- The streak table - what ten straight full-risk losses cost, by the setting of Lesson 2’s dial: at 0.5% risk per trade, -4.9% of the account; at 1%, -9.6%; at 2%, -18.3%; at 5%, -40.1%; at 10%, -65.1%. Losses compound geometrically (0.99^10, not 10 x 1%), which is a mercy at small sizes and an executioner at large ones. The same streak, five different fates - chosen in advance by the size dial alone.

- Why the streak is an appointment, not an accident - exact probability arithmetic on the win rate alone: the chance that one specified block of ten trades is all losses is small (about 0.1% at a 50% win rate, 0.6% at 40%). But 200 trades contain 191 overlapping windows of ten, and the chance that at least one of them runs all-loss is about 9% for the coin-flip trader, about 20% at a 45% win rate, and about 38% at 40%. Your intuition prices the single window; your career contains all of them.

- Why this course refuses verdicts before roughly 200 trades - the sample-size arithmetic (standard error of a proportion, first-year statistics): a win rate measured over 20 trades comes with about –22 percentage points of pure luck either way; over 200 trades, about –7 points; over 400, about –5. At 20 trades you cannot distinguish a good method from a lucky one or a bad one from an unlucky one. Judging there isn’t rigour - it is tea-leaf reading with arithmetic on it.

RULE: Set size so that the worst ordinary thing - ten straight losses, a -19% market slide - is a bad month you can describe calmly, never a hole you have to climb out of. If the streak would end you, the size is wrong, whatever the win rate is.

COMMON MISTAKES

- Measuring a drawdown in dollars (’it’s only $900’) instead of in percent of the peak - the recovery table runs on percentages, and it is the percentages that decide whether you get home.

- Assuming a 10-loss streak means the method broke. At a 40% win rate it is roughly a 38%-likely event inside 200 trades: the base rate, not a verdict.

- Doubling size to win it back. The math of the hole punishes exactly this, geometrically.

- Issuing a verdict on a method at trade 20 - a sample whose win rate carries –22 points of luck. The court isn’t in session yet.

DO IT - WRITE YOUR OWN STREAK LINE

In your journal, using your Stage 0 account figure (or the $10,000 example): (1) compute your 10-loss streak cost at 0.5% and at 1% risk, and the account value after each; (2) write your drawdown ladder in full - the action at -10% from your peak and at -20%; (3) write one sentence: what a -19% SPY slide (spring 2025, real) would do to your account at the position size you actually intend to run. These lines transfer verbatim onto the Personal Risk Sheet in Downloads - the gate checks for them there.

Education only - not financial advice. Risk figures are arithmetic on the lessons’ labeled example numbers. Drawdown figures: SPY daily closes via Yahoo Finance, cross-checked against Nasdaq data, Oct 15, 2026. Streak probabilities are exact probability arithmetic on stated win rates, not predictions. Vajgrt Labs - Education.