EXPECTANCY: WHY WIN RATE ALONE LIES

Vajgrt Labs - Education - Lesson 27 of 72 - 6 min read - Updated Oct 21, 2026

TL;DR

- Expectancy = (win rate x average win) - (loss rate x average loss). It is the average outcome of one trade, repeated many times - the only single number that describes a trading method.

- Win rate alone lies in both directions: winning 60% with $100 average wins and $180 average losses is -$12 a trade; winning 40% with $300 wins and $100 losses is +$60 a trade.

- Expectancy must be computed after costs or it is fiction: on the real Oct 9, 2026 chain quote from Stage 2, worst-case round-trip friction was ~ $16.30 a contract - enough to flip a thin edge negative all by itself.

THE TAKEAWAYS

- Trader A, worked in full: wins 60% of trades, average win $100, average loss $180. Expectancy = 0.60 x $100 - 0.40 x $180 = $60 - $72 = -$12 per trade. Over 100 trades that is about -$1,200 - from a trader who wins most of the time. 'Wins most trades' and 'loses money' are the same sentence here, with no contradiction.

- Trader B, worked in full: wins 40%, average win $300, average loss $100. Expectancy = 0.40 x $300 - 0.60 x $100 = $120 - $60 = +$60 per trade - about +$6,000 over 100 trades, while losing six of every ten. The payoff column, not the win column, did the work. Neither trader is exotic; the difference between them is arithmetic, not talent.

- The breakeven win rate falls out of the payoff: needed win rate = average loss ÷(average win + average loss). Win and lose the same ($100/$100) and you must win 50% just to stand still. Win twice your loss ($200/$100) and 33.3% is enough. Win half your loss ($100/$200) and you need 66.7% - a standard most 'high win-rate' selling quietly fails.

- Costs sit inside the formula, not after it. Stage 2 priced a real round trip on the Oct 9 chain (773 call, bid 20.53 / ask 20.68): worst case ~ $16.30 a contract; filled at the midpoint both ways, ~ $1.30 in contract fees. A method with +$10 of gross expectancy per trade is a losing method filled at the spread and a winning one filled at the mid. Execution is not separate from the edge - it is part of it.

RULE: Never quote a win rate without its payoff, and never quote either without the costs. Expectancy - net, per trade, in dollars - is the only score this course keeps.

COMMON MISTAKES

- Judging any method - a guru's, a friend's, your own - by its win rate alone. 95% winners can be a losing method; 40% winners can be a fine one.

- Averaging wins and losses from memory. Memory edits both columns in your favour; Lesson 6's journal exists because expectancy computed from memory is fiction.

- Quoting gross expectancy and forgetting the toll. The spread and fees are paid on every trade, including the winners.

- Treating last month's expectancy as a permanent property. It is an estimate from a small sample of a changing market - hold it the way Stage 3 holds a trend: in pencil.

DO IT - SCORE THREE TRADERS COLD

In your journal, rebuild this lesson’s two scoreboards from the raw ingredients (don’t copy the answers): Trader A (60%, +$100/-$180) and Trader B (40%, +$300/-$100) - expectancy and breakeven win rate for each. Then score a third, the typical beginner shape: 50% wins, average win $80, average loss $120. Its expectancy is -$20 a trade and its breakeven line is 60% - check your arithmetic against those. Three scoreboards, computed cold, is half of Stage 4’s arithmetic gate.

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.