Win More Wagers

GUIDE

FIND VALUE · EXPECTED VALUE

Expected Value Explained

What a wager is worth on average if your probability is right, and why that "if" is the hard part.

INSIDE

- The EV formula in one line
- Two worked examples
- How EV changes with your estimate
- Why +EV can still lose, often
- A safe way to use EV

Letter · printable | v1.0 · November 2026 | Free · Education only

> Expected value (EV) answers one question: **if my probability is right, what is this wager worth on average?** It is a way to compare a price with a belief. It is never a prediction that the next bet will win.

1 The formula

EV = (win probability × profit) − (loss probability × stake)

Profit = what you win on a winning wager. Divide EV by the stake to get the expected ROI.

WORKED EXAMPLE · AN UNDERDOG AT +150

Your assumption: the underdog wins **45%** of the time. Break-even at +150 is 40%.

EV per $100 = 0.45 × $150 − 0.55 × $100 = $67.50 − $55.00 = **+$12.50**. That is an expected ROI of **12.5%**, because your 45% is above the 40% the price needs.

WORKED EXAMPLE · A FAVORITE AT -110

Your assumption: **52%**. That is above 50%, but break-even at -110 is 52.38%.

EV per $100 = 0.52 × $90.91 − 0.48 × $100 = $47.27 − $48.00 = **-$0.73**. Winning more than half the time was not enough, because of the vig.

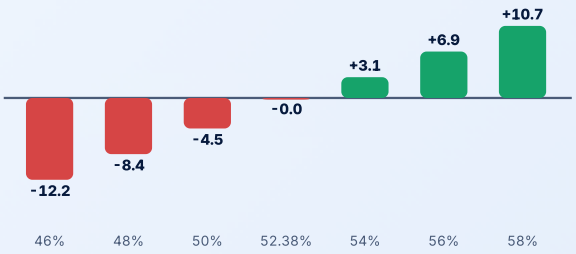
2 EV changes fast with your estimate

At a fixed price of -110, EV per $100 depends only on the probability you assume. The sign flips at the break-even rate.

52.38%

is where EV at -110 crosses zero. Below it each wager costs money on average; above it, the estimate says it earns.

Calculated per $100 staked. Estimates, not results.



3 Your estimate is the weak link

The formula is exact. Your probability is not. Suppose you believe a side wins 55% of the time at -110, but the true rate is lower:

If the true win rate is	EV per $100 at -110	Expected ROI
55%	**+$5.00**	**+5.0%**
53%	+$1.18	+1.2%
52%	-$0.73	-0.7%
50%	-$4.55	-4.5%

Three points of error (55% → 52%) turn a +$5.00 wager into a -$0.73 one. Disciplined analysts shrink their estimates for uncertainty and pass when the edge is thin.

4 EV is an average, not an outcome

WORKED EXAMPLE · 100 WAGERS WITH A TRUE +$5.00 EV

Expected total: 100 × $5.00 = **+$500**. But each wager swings by about ±$95, so over 100 wagers one standard deviation is about **±$950**.

Using a normal approximation, the chance of finishing *below zero* after 100 wagers is still about **30%**, even though the edge is real. And that assumes the 55% estimate is correct.

NEVER READ EV AS A PROMISE

A positive EV does not mean a wager will win, a session will be profitable, or a bettor can earn a living. Most bettors lose money over time.

KEY TAKEAWAYS

- EV = (p × profit) − (1 − p) × stake. Compare p with the price's break-even rate.
- Winning 52% at -110 is still a negative EV: the break-even is 52.38%.
- Small errors in p swamp small edges. Use conservative estimates and pass on thin ones.
- Even with a real edge, the short run is noisy: about 3 in 10 sessions of 100 wagers can finish negative in the example above.

Check your own numbers

Use the free Expected Value calculator to test a price against your estimate.

winmorewagers.com/calculators