

# The Basic EV Calculation

The basic EV calculation is very simple and is composed of two parts:

**EV** = [Part A] - [Part B]

- **Part A:** How often you win x How much you win
- **Part B:** How often you lose x How much you lose

**EV** = [Expected Long-Term Winnings] – [Expected Long-Term Loses]

As you can see above, the calculation compares your long-term winnings and long-term losses to determine if a play is profitable or not.



# Computing EV in 3 Simple Steps

**Step 1:** Determine how often you will win and how much you will win:

- 80% of the time you will win \$500 =  $(.80 \times 500) = \text{\$400}$

**Step 2:** Determine how often you will lose and how much you will lose:

- 20% of the time you will lose \$250 =  $(.2 \times 250) = \text{\$50}$

**Step 3:** Subtract how much you expect to lose from how much you expect to win:

- $\text{\$400} - \text{\$50} = \text{\$350} + \text{EV}$



# Example Hand #1

Pre-flop, we have J ♣ J ♠ and villain open-jams all-in with \$80 effective stack sizes in a \$200 buy-in game. We estimate that we're a 70% favorite to win and will lose 30% of the time, based on our opponent's estimated open-jamming range. If we call and win, we'll win the amount of money that's already in the pot before our call, which is \$83, which includes the blinds. However, if we call and lose, we'll lose the \$80 we risked pre-flop by calling villain's all-in jam.

$$EV = [\text{Part A}] - [\text{Part B}]$$

- **Part A:** How often you win x How much you win
  - How much we will win x percentage to win =  $(\$83 \times .70) = \$58.10$
- **Part B:** How often you lose x How much you lose
  - How much we will lose x percentage to lose =  $(\$80 \times .30) = \$24.00$

$$EV = \$58.10 - \$24.00 = \$34.10$$

This is a **+EV** play. Each time you make this play, you can expect to profit \$34.10 on average, over the long run.



# Example Hand #2

We raise UTG to \$6 with A♣ A♦ and get called by one opponent. The flop comes K♠ 8♥ 3♠. We bet \$12 into a \$15 pot, our opponent raises to \$30, we re-raise to \$80, and villain goes all-in for his remaining \$175 stack. Having our opponent covered, we make the call for an additional \$113 and villain turns over K♣ 9♦. The turn card is 9♥ and the river card is Q♣, causing us to become unlucky and lose a massive pot.

## Determining Win & Loss Information

Using Equilab, we determine that we expect to win and lose:

- **Win:** 82.40%
- **Lose:** 17.60%

**Total Pot Size:** \$312

- **Win Amount:** \$312
- **Loss Amount:** \$113

$$EV = (\$312 \times .824) - (\$113 \times .176) = \mathbf{\$237.20}$$

$$EV = \$257.09 - \$19.89 = \mathbf{\$237.20}$$