



Set-Mining Fundamentals

Set-Mining: When you call a pre-flop raise with the primary intention of flopping a set with a small pocket pair such as 22-55.

- It's a wonderful play when executed correctly because it's often disguised and likely to get paid off against strong hands such as JJ+ and AQ+ when our opponents flop top pair or an over-pair.
- However, lots of poker players set-mine incorrectly, turning a highly lucrative play into unprofitable long-term play.



How Often You'll Flop a Set or Better

- Without going into the math, the odds of flopping a set or better is 11.76% or 7.5:1 odds, which is 1 in 8.5 times.
- When I say the odds of flopping a set or better, I'm also including full houses and quads.
- The odds of flopping exactly a set is slightly more (approximately 0.5% more) but we're not really concerned with specifically only flopping a set because we're more than happy when we also flop a full house or quads whenever we set-mine.



Set-Mining is a Game of Implied Odds

- Because we'll only flop a set every 1 in 8.5 times we try, we have to make sure that during the one time we do, we make enough money to make up for the other 7.5 times we don't flop a set.
- Since we'll rarely get a good direct pot odds price to call a raise pre-flop, set-mining is an implied odds play that relies on making a decent profit post-flop after making a set.
- This is where lots of poker players misunderstand set-mining.



Set-Mining Simple Example

- Let's explain this with a simple example, where we call a 3bb pre-flop raise with the hopes of flopping a set.
- For simplicity's sake, and to ensure we make winning set-mining decisions, we'll round up our set-mining odds to 8:1, or 1 in every 9 times.

| Hand # | Call and Lose (Don't Flop a Set) | Call and Win (Flop a Set) |
|-------------------------|-------------------------------------|------------------------------|
| 1 | 3bb | |
| 2 | 3bb | |
| 3 | 3bb | |
| 4 | 3bb | |
| 5 | 3bb | |
| 6 | 3bb | |
| 7 | 3bb | |
| 8 | 3bb | |
| 9 | | 24bb |
| Total Lose / Win | -24bb | +24bb |

- What the table shows is that since we lose 3bb every time we don't flop a set, assuming we rarely win post-flop with 22-55, the one-in-nine times we do, we need to win 24bb on the average – not including rake – just to make this a long-term break-even play.
- If we're not getting at least a 24bb return on our 3bb investment (ROI), on the average, every time we flop a set, we're not set-mining profitably.



Profitable Set-Mining: 15-to-1 Rule

- To ensure our set-mining decisions are profitable, we should follow the 15-to-1 rule – at a minimum.
- This rule states that for every 1bb we invest, we should expect a return of 15 times our initial 1bb investment.
- Expanding on the table example, we would then need a $3\text{bb} \times 15 = 45\text{bb}$ return on our investment every time we flop a set.
- Some people advocate a 20-to-1 rule, but I feel that's a bit too conservative.



Profitable Set-Mining Criteria

- Since set-mining relies on implied odds, we need to take several factors into consideration.
 - **Effective Stack Sizes:** First, we must consider the effective stack sizes in the hand to determine if we can get a 15 times return on our investment.
 - **Opponent's Hand Strength:** Second, we need to consider the strength of our opponent's hand. If it's strong, we might have good implied odds. Conversely, if it's weak, we won't have good implied odds.
 - **Opponent's Playing Style:** Lastly, we need to consider our opponent's playing style and if we expect him to pay us off or not when we hit our set.