# Early Game – Preflop

Betting is done through a basic hand evaluator.

We have a threshold of keepable hands. These should be dependent on position in the game. The earlier a player is in the game, the worse their chances of winning are. This means having the dealer rotate is critical. We have three zones, early, mid, late. This is calculated by #players/3.

# Postflop

Hands have a numerical value, hands of equal value are of the same rank. Note the high card for a hand does matter. We can also calculate the number of “outs” a player has. These are *unique* cards that will improve our current hand by a full rank, such as high card becoming a pair.

# Opponents Betting

Assume no bluffing at beginning of game. Based on opponents play history, we will skew their probability of winning downward by some percent. Looking at number of hands won, hands played, (early betting?).

Signs of bluffing:

* Playing most hands (should play ~ 20%)
* Betting high amounts most games
  + Going all in
  + Constant high bets

# Our Betting

Even if we would normally fold, if the actions before us are all check, we will also check and get a free card. From there we can follow our post flop strategy. Based on our probability of winning and our number of outs we should be able to make an informed decision.

Have a small chance of betting very aggressively:

* Skew our chances of winning by some percent
* Shift our opening hand evaluator by at least one rank.

## Betting Strategy

* Pre flop
  + Evaluate opening hand
  + Always take a free card
* Post flop
  + Calculate number of outs, and from this, the chances of our hand improving
  + Put opponent on a (basic) range
  + Take into account our chances of winning, and if above a threshold, perform an action
    - If we are just above the threshold, call, check, or open with small bet
    - If moderately above, call moderate bets, raise a little
    - If near guarantee, don’t bet until at least the *turn* to let other increase the bet naturally. (don’t want to scare opponents)

Links

Probability of winning based on opening hand (chart up to 8 players)

<https://www.beatthefish.com/poker-strategy/texas-holdem-poker-hands/>

(putting an opponent on a range)

<http://www.pokerlistings.com/why-and-how-thinking-in-ranges-drastically-improves-your-poker-game>

<http://www.wikihow.com/Calculate-Pot-and-Hand-Odds-in-Limit-Hold-%27Em-Poker>