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NOTE ON SOME POKER VARIATIONS

INTRODUCTION

The attached document summarizes the results of 100,000 simulations for many of the games played at our (generally) friendly Wednesday poker gathering.

“Poker” is used here in the loosest possible sense. These games vary wildly. In one, ten wild cards are included; in another, each player may designate a personal wild card rank for high hand only. Many use various geometric layouts that determine which cards may be used from the hand and which from the table. Qualifying hands to win high vary as well: some games have no qualifiers, while others require a Straight or even a Full House to qualify to win high. The rules for low hands are equally varied. In some games, the best possible low is A2345; in others, it is 6432A. And even the method of declaring High or Low may change from game to game, either simultaneously or sequentially from the last bet or raise.

But remembering the rules is only part of the challenge. Sometimes the harder adjustment is abandoning long-held instincts about what makes a strong poker hand.

For example, in a five-player hand of straight seven-card stud with a shared community card (“spit”), anything better than a flush appears only about 2 percent of the time. In a game like *The Neal*, by contrast, a full house is not so much a triumph as the price of admission, appearing nearly two-thirds of the time. Four of a kind shows up more than 12 percent of the time, and straight flushes about 5 percent of the time.

These notes are intended to help recalibrate those expectations.

So, if your monster hand just got steamrolled, don’t take it personally. It may have been a brilliant hand in ordinary poker—just not in *that* game.

Ken Klinger

NOTE ON SOME POKER VARIATIONS

THE RICK

Deal four cards to each player, then one row of four cards and one row of two cards face down. Use two cards from your hand, two from the four-card row, and one from the two-card row. There are 72 different card combinations to make up the player's hand. The game is usually played with the best low set at 6432A.

The median high hand was Two Pair, Kings over Tens. There is about a 15% chance of getting a flush or better and about a 30% chance of getting a straight or better.

With five players, the median high hand was a Queen-High Flush. There is over a 30% chance of a full house or better.

Regarding low hands, the median low was 9-low, which may not qualify as the game is often played with an 8-low or better qualifier. There was about a 35% chance of making a low hand.

With five players, the median low hand was 76532. There was a 24% chance someone had a Six-Low, and about a 25% chance there was no low.

| Number of Players | Median High | Median Low |
|-------------------|----------------|----------------|
| One | KKTT8 Two Pair | 97654 (No Low) |
| Five | QJ762 Flush | 76532 |

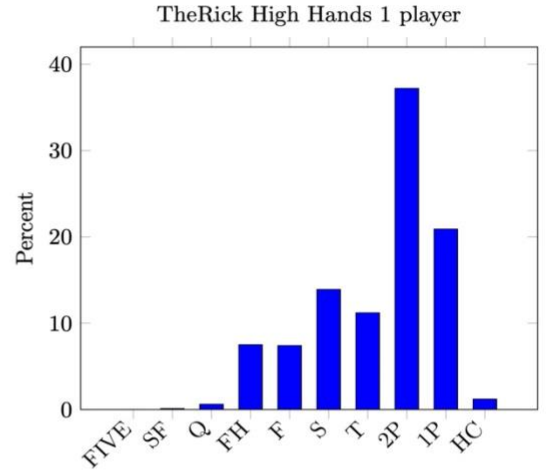
With five or more players, a Full House or better wins approximately a third of the time, and a Flush about 20% of the time.

Keep in mind that a Flush can occur only if at least two cards in the four-card row and one card in the two-card row are of the same suit. A Full House or Four of a Kind requires at least one paired rank on the board.

NOTE ON SOME POKER VARIATIONS

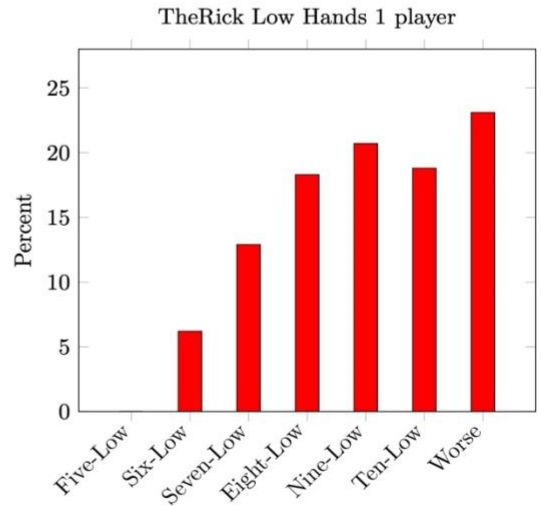
TheRick High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.1 |
| Quads | 0.6 |
| Full House | 7.5 |
| Flush | 7.4 |
| Straight | 13.9 |
| Trips | 11.2 |
| Two Pair | 37.2 |
| One Pair | 20.9 |
| High Card | 1.2 |
| Total | 100.0 |



TheRick Low Hands 1 player

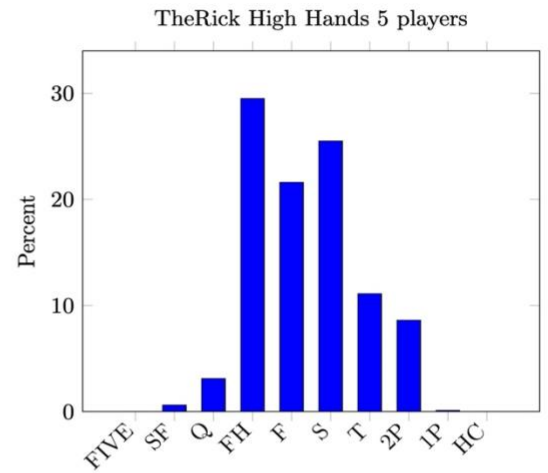
| Rank | Percent |
|-----------|---------|
| Five-Low | 0.0 |
| Six-Low | 6.2 |
| Seven-Low | 12.9 |
| Eight-Low | 18.3 |
| Nine-Low | 20.7 |
| Ten-Low | 18.8 |
| Worse | 23.1 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

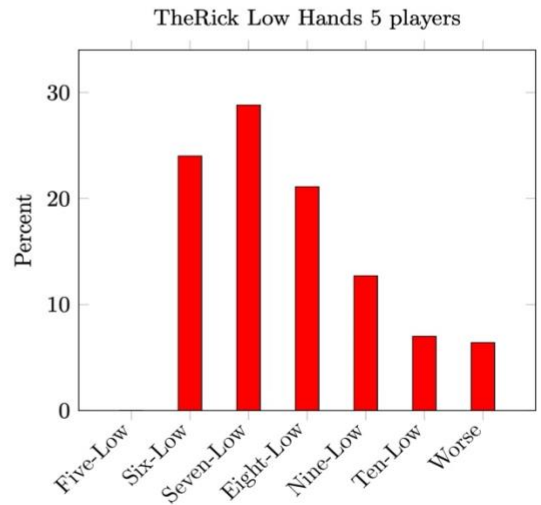
TheRick High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.6 |
| Quads | 3.1 |
| Full House | 29.5 |
| Flush | 21.6 |
| Straight | 25.5 |
| Trips | 11.1 |
| Two Pair | 8.6 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



TheRick Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 0.0 |
| Six-Low | 24.0 |
| Seven-Low | 28.8 |
| Eight-Low | 21.1 |
| Nine-Low | 12.7 |
| Ten-Low | 7.0 |
| Worse | 6.4 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

THE KEN

Deal five cards to each player, then one row of four cards and two rows of two cards face down. Use two cards from your hand, two cards from the four-card row, and one card from either of the two-card rows - but not both. There are 240 possible card combinations for the player's hand. This analysis assumes A2345 (wheel) is the best low hand, and this game is usually played without high or low qualifiers and without declarations.

The median high hand was a nine-high straight. There is about a 20% chance of getting a full house or better, and about a 35% chance of getting a flush or better.

With five players, the median high hand was Sevens Full, and there is over a 60% chance of a full house or better.

Regarding low hands, the median low hand was an Eight-Six low. There is about a 5% chance of a Five low and almost a 20% chance of a Six low or better.

With five players, the median low hand was 7432A. There is about a 20% chance of a Five Low, and over a 45% chance of a Six-low or better.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | 98765 Straight | 86532 |
| Five | 77722 Full House | 7432A |

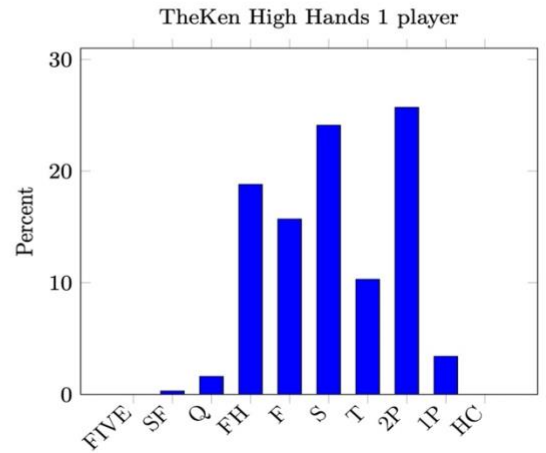
With five or more players, a Full House or better wins approximately two-thirds of the time, and a Flush about 20% of the time.

Keep in mind that a Flush can occur only if at least two cards in the four-card row and one card in the other two rows are of the same suit. A Full House or Four of a Kind requires at least one paired rank on the board.

NOTE ON SOME POKER VARIATIONS

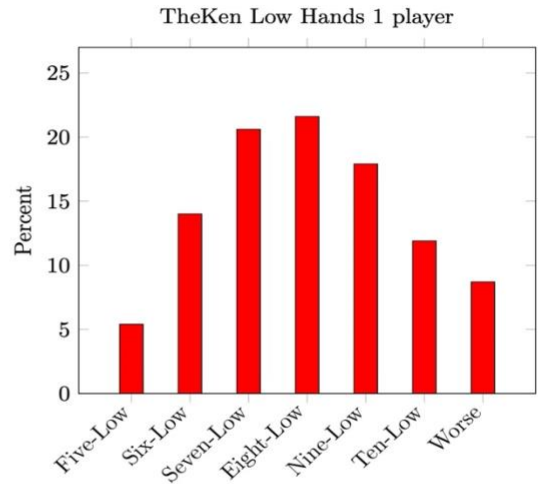
TheKen High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 1.6 |
| Full House | 18.8 |
| Flush | 15.7 |
| Straight | 24.1 |
| Trips | 10.3 |
| Two Pair | 25.7 |
| One Pair | 3.4 |
| High Card | 0.0 |
| Total | 100.0 |



TheKen Low Hands 1 player

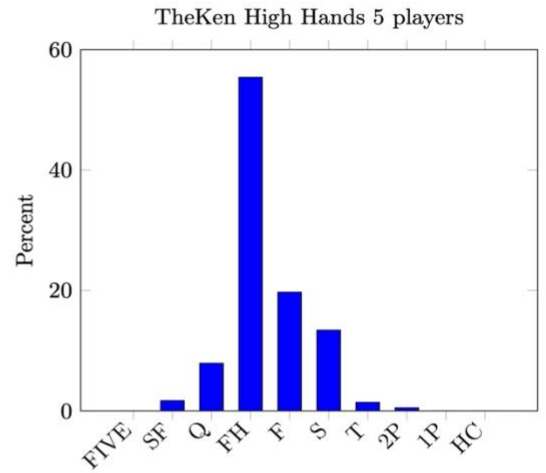
| Rank | Percent |
|-----------|---------|
| Five-Low | 5.4 |
| Six-Low | 14.0 |
| Seven-Low | 20.6 |
| Eight-Low | 21.6 |
| Nine-Low | 17.9 |
| Ten-Low | 11.9 |
| Worse | 8.7 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

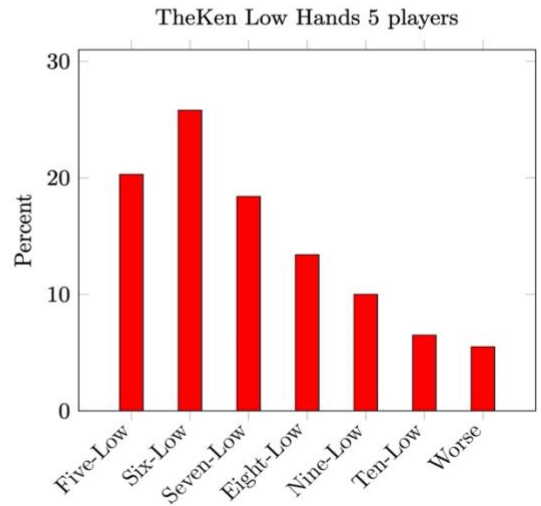
TheKen High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.7 |
| Quads | 7.9 |
| Full House | 55.4 |
| Flush | 19.7 |
| Straight | 13.4 |
| Trips | 1.4 |
| Two Pair | 0.5 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TheKen Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 20.3 |
| Six-Low | 25.8 |
| Seven-Low | 18.4 |
| Eight-Low | 13.4 |
| Nine-Low | 10.0 |
| Ten-Low | 6.5 |
| Worse | 5.5 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

THE HARVEY

Deal five cards to each player, and place two rows of five cards face down. Make your best hand using two cards from your hand, along with three cards from one of the rows. The wheel is the best low. There are 200 possible card combinations for the player's hand.

The median high hand was an Eight-High straight. There is about a 20% chance of getting a Full House or better, and over a 35% chance of getting a Flush or better. There is almost a 60% chance of a Full House or better with five players.

Regarding low hands, the median low hand was an Eight-Six low. If there is an eight-low qualifier, the chance of no low is almost 35%. There is almost a 20% chance of getting a Six Low or better, and over a 40% chance of getting a seven low or better.

With five players, there is almost a 20% chance of a Five-Low.

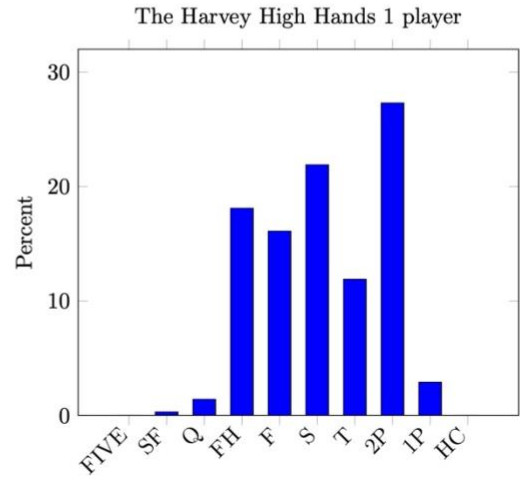
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | 87654 Straight | 86432 |
| Five | 555TT Full House | 7432A |

This game is essentially two rows of Omaha Eight with a five-card player hand. It has fallen out of favor recently, as the Triple Harvey or the Triple Harvey with an indicator wild card is played more often.

NOTE ON SOME POKER VARIATIONS

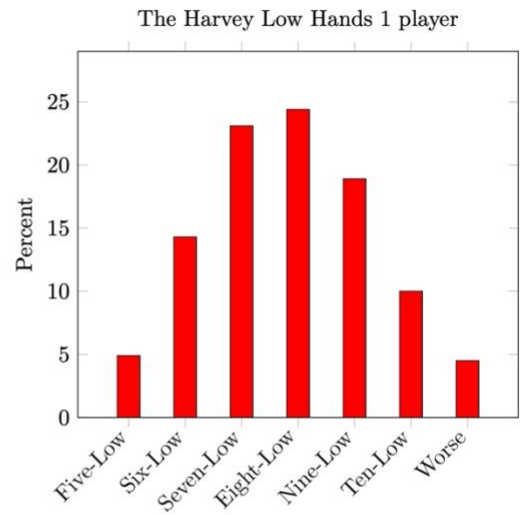
The Harvey High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 1.4 |
| Full House | 18.1 |
| Flush | 16.1 |
| Straight | 21.9 |
| Trips | 11.9 |
| Two Pair | 27.3 |
| One Pair | 2.9 |
| High Card | 0.0 |
| Total | 100.0 |



The Harvey Low Hands 1 player

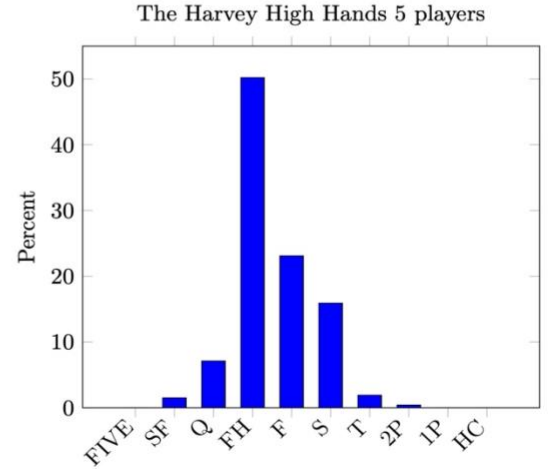
| Rank | Percent |
|-----------|---------|
| Five-Low | 4.9 |
| Six-Low | 14.3 |
| Seven-Low | 23.1 |
| Eight-Low | 24.4 |
| Nine-Low | 18.9 |
| Ten-Low | 10.0 |
| Worse | 4.5 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

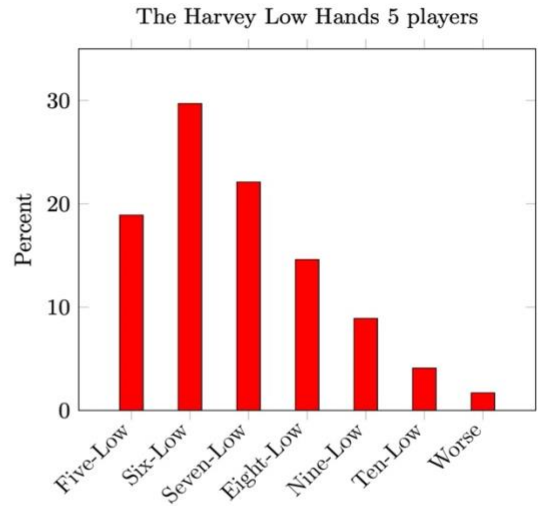
The Harvey High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.5 |
| Quads | 7.1 |
| Full House | 50.2 |
| Flush | 23.1 |
| Straight | 15.9 |
| Trips | 1.9 |
| Two Pair | 0.4 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



The Harvey Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 18.9 |
| Six-Low | 29.7 |
| Seven-Low | 22.1 |
| Eight-Low | 14.6 |
| Nine-Low | 8.9 |
| Ten-Low | 4.1 |
| Worse | 1.7 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TRIPLE HARVEY

Deal five cards to each player, and three rows of five cards face down. Make your best hand using two cards from your hand, along with three cards from one of the rows. The wheel is the best low. There are 300 possible combinations for the player's hand.

The median high hand was an Ace-high Straight (Broadway). There is almost a 30% chance of a Full House or better, and almost a 50% chance of a Flush or better. With five players, there is over a 10% chance of Quads or better, and a Full House or better occurs almost 75% of the time.

Regarding low hands, the median low hand was a Seven-Low. If there is an Eight-Low qualifier, the chance of not having a low hand is about 20%. There is almost a 30% chance of getting a Six-Low or better and a 55% chance of getting a Seven-Low or better. There is almost a 30% chance of a Five-Low with five players.

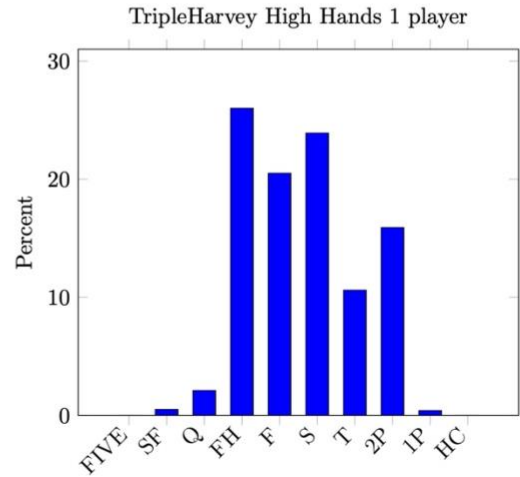
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | AKQJT Straight | 76532 |
| Five | 99966 Full House | 6532A |

Keep in mind that with five players in the hand, a Full-House or higher occurs over 70% of the time, and a perfect low hand almost 30% of the time.

NOTE ON SOME POKER VARIATIONS

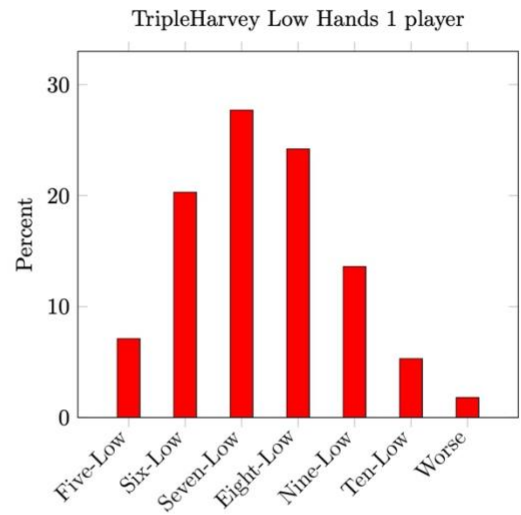
TripleHarvey High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.1 |
| Full House | 26.0 |
| Flush | 20.5 |
| Straight | 23.9 |
| Trips | 10.6 |
| Two Pair | 15.9 |
| One Pair | 0.4 |
| High Card | 0.0 |
| Total | 100.0 |



TripleHarvey Low Hands 1 player

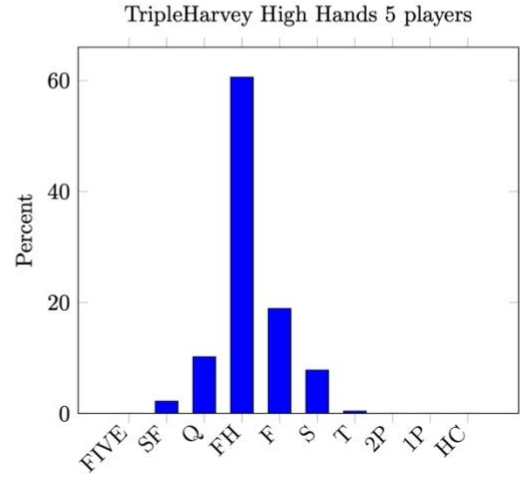
| Rank | Percent |
|-----------|---------|
| Five-Low | 7.1 |
| Six-Low | 20.3 |
| Seven-Low | 27.7 |
| Eight-Low | 24.2 |
| Nine-Low | 13.6 |
| Ten-Low | 5.3 |
| Worse | 1.8 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

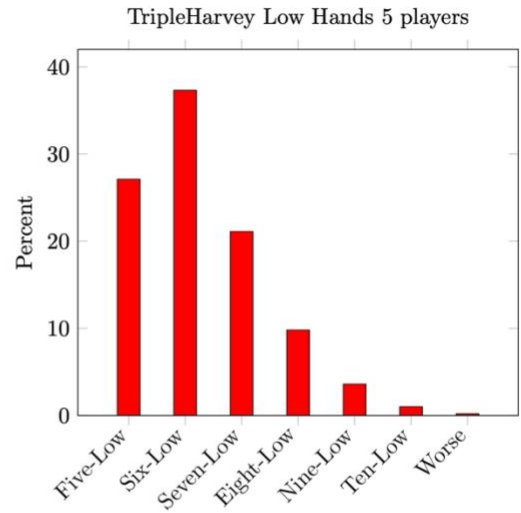
TripleHarvey High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.2 |
| Quads | 10.2 |
| Full House | 60.6 |
| Flush | 18.9 |
| Straight | 7.8 |
| Trips | 0.4 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TripleHarvey Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 27.1 |
| Six-Low | 37.3 |
| Seven-Low | 21.1 |
| Eight-Low | 9.8 |
| Nine-Low | 3.6 |
| Ten-Low | 1.0 |
| Worse | 0.2 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TRIPLE HARVEY TWO FOUR

Deal five cards to each player, and three rows of five cards face down. Make your best hand using exactly two or four cards from your hand, along with three cards or one card from one of the three rows. The wheel is the best low. There are 375 possible combinations for the player's hand, not much more than the 300 possible combinations in the two-card Triple Harvey.

The median high hand was a Queen-high-Flush. There is over a 30% chance of a Full House or better, and about a 55% chance of a Flush or better. There is over a 15% chance of Quads or better with five players.

Regarding low hands, the median low hand was a Seven-Low. There is about a 30% chance of getting a Six-Low or better and about a 50% chance of getting a Seven-Low or better. There is over a 30% chance of a Five-Low with five players.

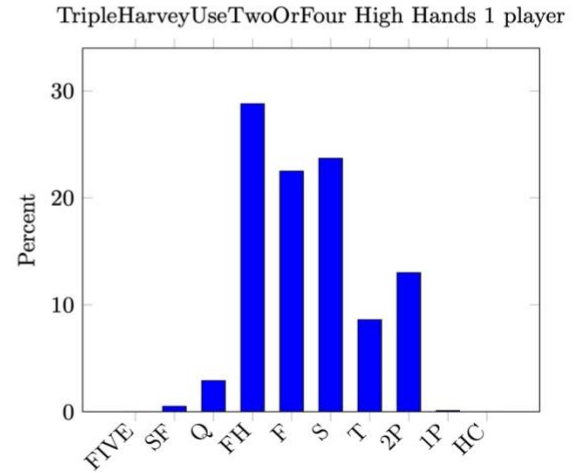
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | QT876 Flush | 7653A |
| Five | TTT99 Full House | 6532A |

Keep in mind that with five players in the hand, a Full-House or higher occurs about 80% of the time, and a perfect low hand occurs over 30% of the time. With players able to use four cards from their hand, less information can be gleaned from the table cards.

NOTE ON SOME POKER VARIATIONS

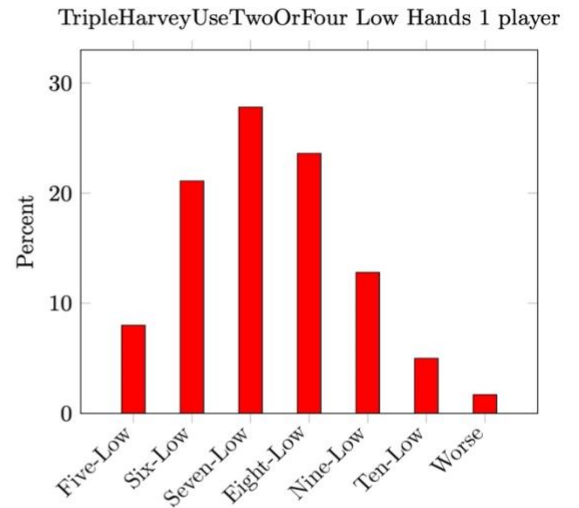
TripleHarveyUseTwoOrFour High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.9 |
| Full House | 28.8 |
| Flush | 22.5 |
| Straight | 23.7 |
| Trips | 8.6 |
| Two Pair | 13.0 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



TripleHarveyUseTwoOrFour Low Hands 1 player

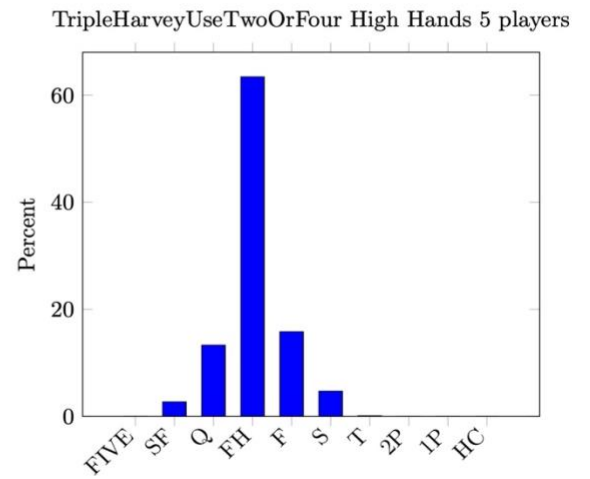
| Rank | Percent |
|-----------|---------|
| Five-Low | 8.0 |
| Six-Low | 21.1 |
| Seven-Low | 27.8 |
| Eight-Low | 23.6 |
| Nine-Low | 12.8 |
| Ten-Low | 5.0 |
| Worse | 1.7 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

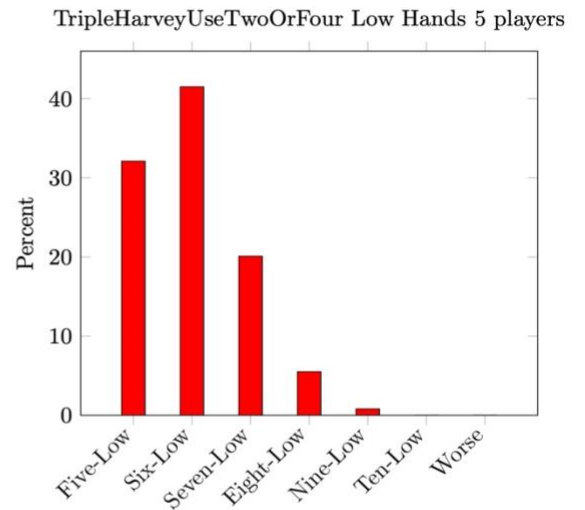
TripleHarveyUseTwoOrFour High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.7 |
| Quads | 13.3 |
| Full House | 63.4 |
| Flush | 15.8 |
| Straight | 4.7 |
| Trips | 0.1 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TripleHarveyUseTwoOrFour Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 32.1 |
| Six-Low | 41.5 |
| Seven-Low | 20.1 |
| Eight-Low | 5.5 |
| Nine-Low | 0.8 |
| Ten-Low | 0.0 |
| Worse | 0.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

THE NEAL

This is a variation of the Triple Harvey that allows *significantly* more possible hands. Each player receives five cards, and then three rows of five cards are dealt face down. Make your best hand using two cards from your hand and any of the following cards from rows one, two, and three, respectively: (3,0,0), (0,3,0), (0,0,3), (1,1,1), (2,1,0), (1,2,0), (0,2,1), (0,1,2). There are 3,550 possible combinations for the player's hand.

The Neal can be played with or without the wheel (A2345) as the best low hand. The analysis that follows assumes the wheel plays as low.

The median high hand was Tens Full over Jacks. There is a better than 15 % chance of having quads or better. Quads or better occur over 60% of the time with five players.

The median low hand was 6542A. There is almost a 30% chance of a Five-Low, and over a 60% chance of a Six-Low or better. A five-low occurs in over 75% of cases with five players.

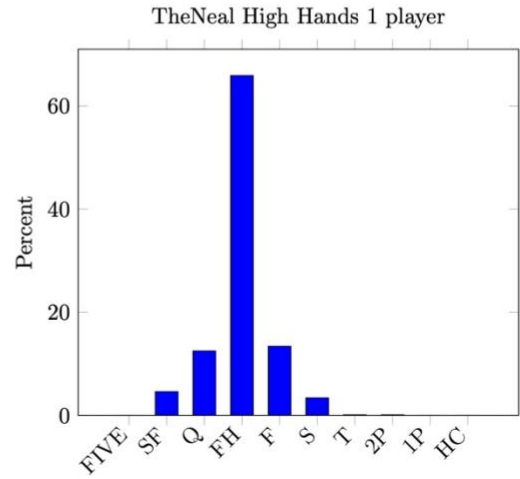
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | TTTJJ Full House | 6542A |
| Five | 7777T Quads | 5432A |

Generally, playing to win the high hand is more profitable. But keep in mind that Straight-Flushes and Quads occur over 60% of the time with five or more players. To win the low hand, you generally need a perfect 5-Low, and don't be surprised if you wind up splitting with other players.

NOTE ON SOME POKER VARIATIONS

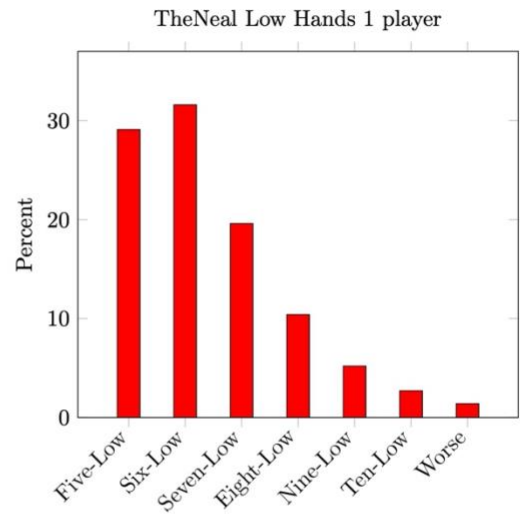
TheNeal High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 4.6 |
| Quads | 12.5 |
| Full House | 65.9 |
| Flush | 13.4 |
| Straight | 3.4 |
| Trips | 0.1 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TheNeal Low Hands 1 player

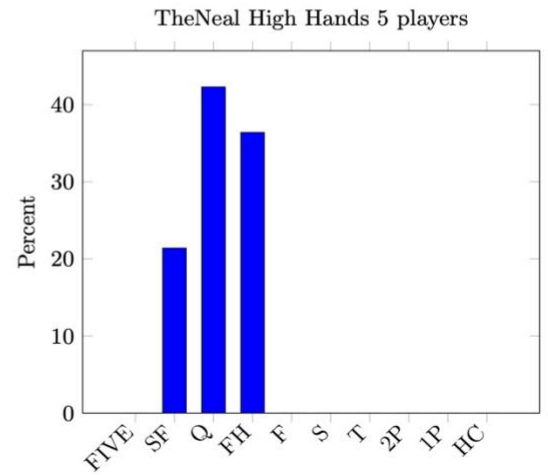
| Rank | Percent |
|-----------|---------|
| Five-Low | 29.1 |
| Six-Low | 31.6 |
| Seven-Low | 19.6 |
| Eight-Low | 10.4 |
| Nine-Low | 5.2 |
| Ten-Low | 2.7 |
| Worse | 1.4 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

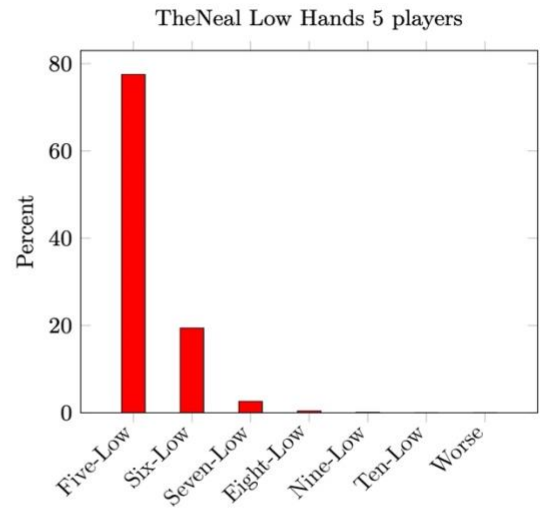
TheNeal High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 21.4 |
| Quads | 42.3 |
| Full House | 36.4 |
| Flush | 0.0 |
| Straight | 0.0 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TheNeal Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 77.5 |
| Six-Low | 19.4 |
| Seven-Low | 2.6 |
| Eight-Low | 0.4 |
| Nine-Low | 0.1 |
| Ten-Low | 0.0 |
| Worse | 0.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

BUNDLES

Deal five cards to each player, then three rows of two cards and two rows of three cards, all face down. Make your best hand using three cards in your hand together with a two-card row and two cards in your hand combined with a three-card row. There are 50 possible combinations for the player's hand. This game is sometimes played with an 8-Low qualifier.

The median high hand was two pair, Aces over Tens. There is about a 13% chance of getting a Flush or better and a 25% chance of getting a Straight or better. There is almost a 30% chance of a Full House or better with five players.

Regarding low hands, the median low hand was a Nine-Seven low. There is about a 20% chance of getting a Seven low or better and about a 40% chance of getting an Eight low or better. There is about a 28% chance of a Six-Low or better with five players.

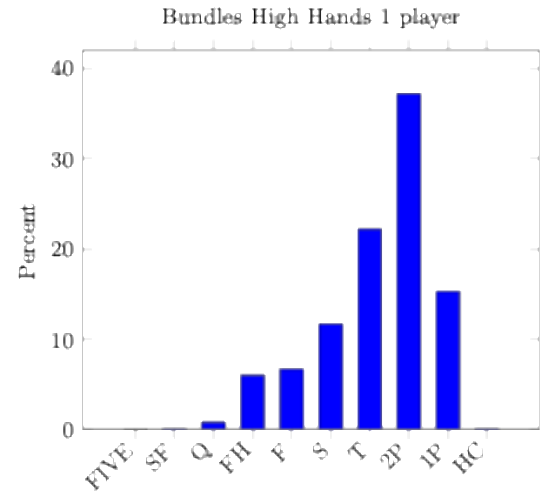
| Number of Players | Median High | Median Low |
|-------------------|----------------|------------|
| One | AATTK Two Pair | 97532 |
| Five | AKQJT Straight | 7652A |

The game Bundles is really five separate poker hands, which tends to keep more players in the pot. A Straight is a strong hand in Bundles, and even Trips wins more than 25% of the time.

NOTE ON SOME POKER VARIATIONS

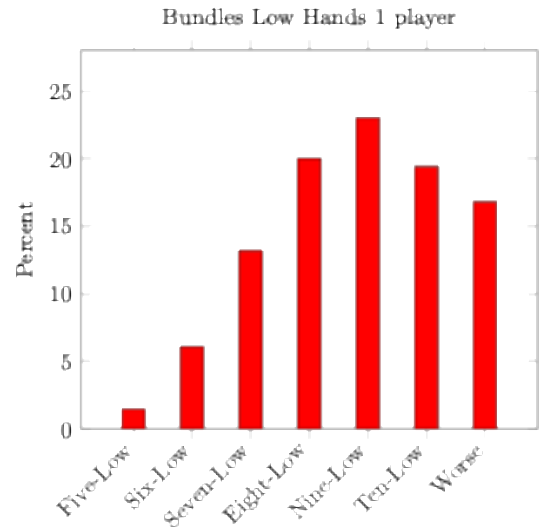
Bundles High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.1 |
| Quads | 0.8 |
| Full House | 6.0 |
| Flush | 6.7 |
| Straight | 11.7 |
| Trips | 22.2 |
| Two Pair | 37.2 |
| One Pair | 15.3 |
| High Card | 0.1 |
| Total | 100.0 |



Bundles Low Hands 1 player

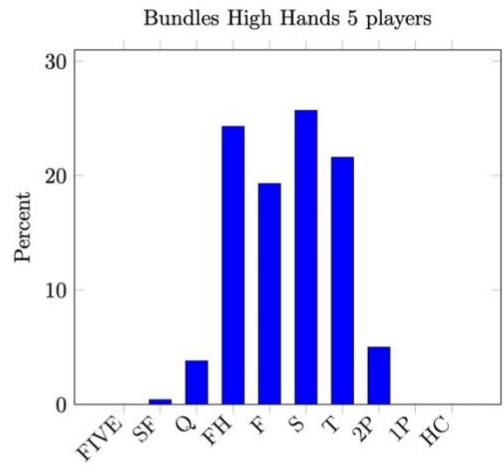
| Rank | Percent |
|-----------|---------|
| Five-Low | 1.5 |
| Six-Low | 6.1 |
| Seven-Low | 13.2 |
| Eight-Low | 20.0 |
| Nine-Low | 23.0 |
| Ten-Low | 19.4 |
| Worse | 16.8 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

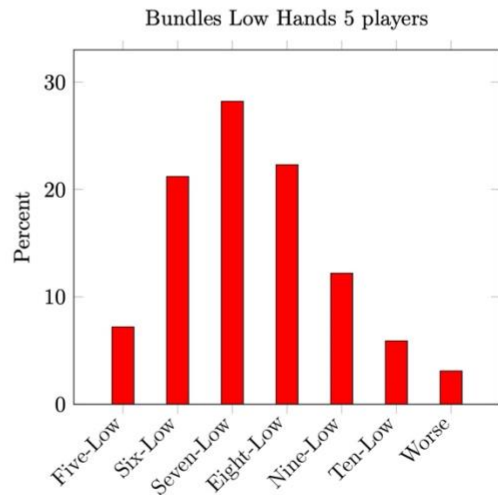
Bundles High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.4 |
| Quads | 3.8 |
| Full House | 24.3 |
| Flush | 19.3 |
| Straight | 25.7 |
| Trips | 21.6 |
| Two Pair | 5.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Bundles Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 7.2 |
| Six-Low | 21.2 |
| Seven-Low | 28.2 |
| Eight-Low | 22.3 |
| Nine-Low | 12.2 |
| Ten-Low | 5.9 |
| Worse | 3.1 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

LOMAHA

Deal five cards to each player and set up twelve table cards face down in an L-shape. Each leg of the L consists of two pairs of cards, while four cards form the base. Players must create their best 5-card high and low hands using two cards from their hand, one from any of the two pairs in the leg, and one from the base. The wheel plays, making 5432A the best possible low hand.

There are 320 possible hands in this game.

Usually, a qualifying rule is applied: to win low, the low hand must be Eight-Low or better. There is about an 8% chance that no Eight-Low or better is possible based on the table cards, and about a 21% chance that an Eight-Low or better is possible in only one half of the L.

The median player's high hand was an Ace-High Straight, while the median low hand was 76542. There is almost a 30% chance of a Full House or better, and over a 45% chance of a Flush or better.

With five players, the median high hand shifts to Nines Full, and the median low hand to 6542A. There is over a 75% chance of a Full House or better with five players.

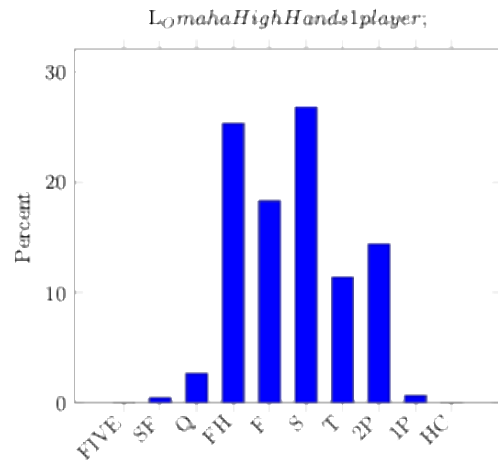
With respect to low hands, there is over a 25% chance a player cannot make an 8-Low or better. There is almost an 8% chance of a Five-Low and over a 25% chance of a Six-Low or better. With five players, there is about a 28% chance of a 5432A and a 60% chance of a Six-Low or better.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | AKQJT Straight | 76542 |
| Five | 999AA Full House | 6542A |

NOTE ON SOME POKER VARIATIONS

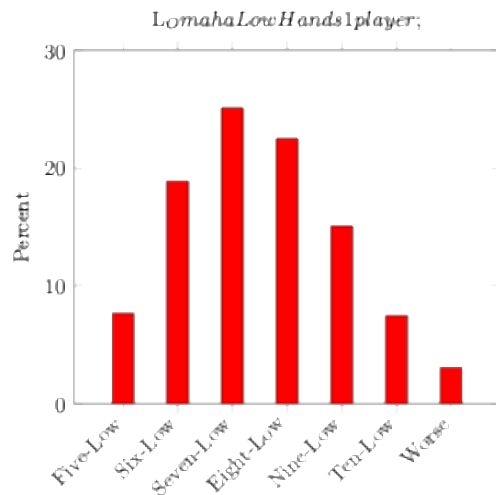
LomahaHighHands1player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.7 |
| Full House | 25.3 |
| Flush | 18.3 |
| Straight | 26.8 |
| Trips | 11.4 |
| Two Pair | 14.4 |
| One Pair | 0.7 |
| High Card | 0.0 |
| Total | 100.0 |



LomahaLowHands1player

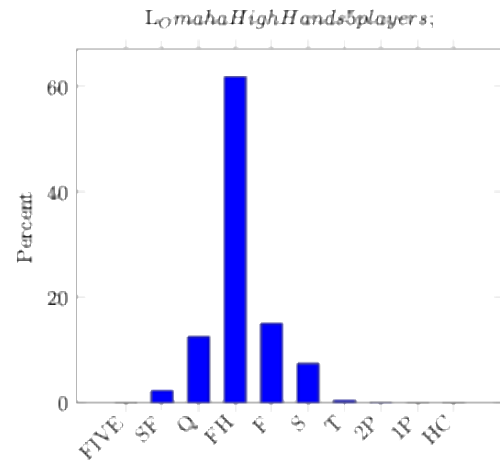
| Rank | Percent |
|-----------|---------|
| Five-Low | 7.7 |
| Six-Low | 18.9 |
| Seven-Low | 25.1 |
| Eight-Low | 22.5 |
| Nine-Low | 15.1 |
| Ten-Low | 7.5 |
| Worse | 3.1 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

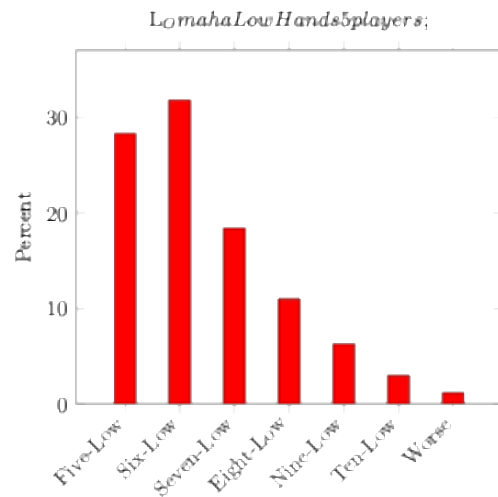
L Omaha High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.4 |
| Quads | 12.6 |
| Full House | 61.8 |
| Flush | 15.1 |
| Straight | 7.5 |
| Trips | 0.5 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



L Omaha Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 28.3 |
| Six-Low | 31.8 |
| Seven-Low | 18.4 |
| Eight-Low | 11.0 |
| Nine-Low | 6.3 |
| Ten-Low | 3.0 |
| Worse | 1.2 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

MUST-MAY-MUST

Deal five cards to each player and nine cards face down in three rows of three. Players must create their best 5-card high and low hands using one of the following options: Two cards from their hand and one card from each row. Three cards from their hand and one card each from the top and bottom row. The wheel plays, making 5432A the best possible low hand.

There are 360 possible card combinations to form hands in this game. To win low, a player's low hand must be 8-low or better.

The median high hand was an Ace-High Straight. There is almost a 30% chance of a Full-House or better. With five players, the median high hand was Nines Full. There is an over 75% chance of a Full House or better with five players.

Regarding low hands, the median low was 8532A, with about a 25% chance of a Six-Low or better. With five players, the median low was 6542A, and there is almost a 30% chance that one player at least has a Five-Low.

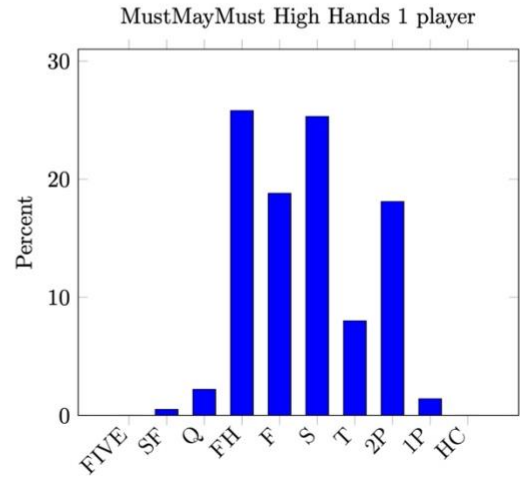
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | AKQJT Straight | 8532A |
| Five | 999KK Full House | 6542A |

Don't be deceived by the small number of table cards. The option to use two or three in one's hand, along with two or three sets of three table cards, results in a strong possibility of a Full-House or better, more than three-fourths of the time.

NOTE ON SOME POKER VARIATIONS

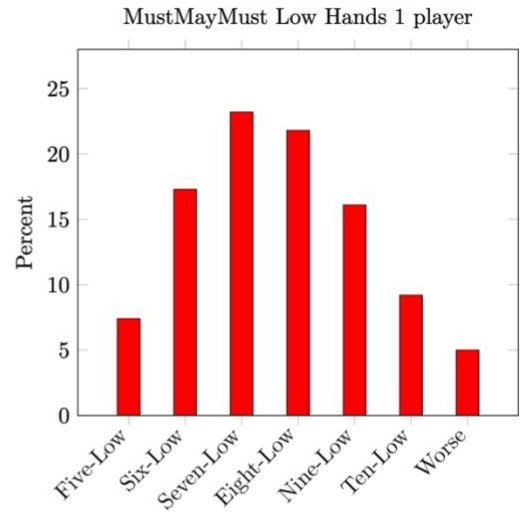
MustMayMust High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.2 |
| Full House | 25.8 |
| Flush | 18.8 |
| Straight | 25.3 |
| Trips | 8.0 |
| Two Pair | 18.1 |
| One Pair | 1.4 |
| High Card | 0.0 |
| Total | 100.0 |



MustMayMust Low Hands 1 player

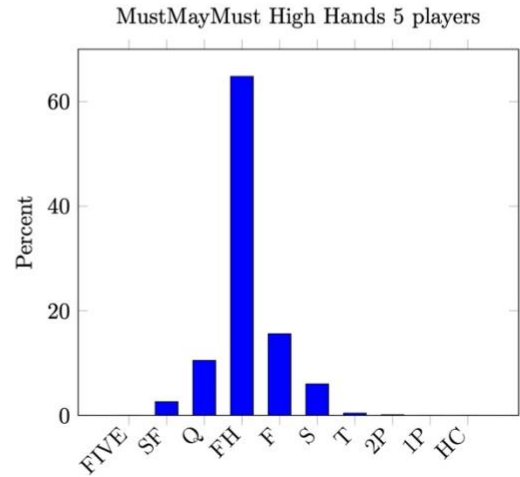
| Rank | Percent |
|-----------|---------|
| Five-Low | 7.4 |
| Six-Low | 17.3 |
| Seven-Low | 23.2 |
| Eight-Low | 21.8 |
| Nine-Low | 16.1 |
| Ten-Low | 9.2 |
| Worse | 5.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

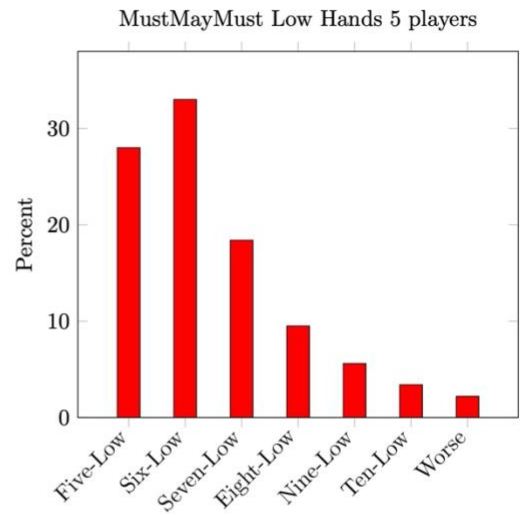
MustMayMust High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.6 |
| Quads | 10.5 |
| Full House | 64.8 |
| Flush | 15.6 |
| Straight | 6.0 |
| Trips | 0.4 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



MustMayMust Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 28.0 |
| Six-Low | 33.0 |
| Seven-Low | 18.4 |
| Eight-Low | 9.5 |
| Nine-Low | 5.6 |
| Ten-Low | 3.4 |
| Worse | 2.2 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

PYRAMID

Deal five cards to each player and then fifteen cards in rows of 5, 4, 3, 2, 1. Make your best hand using up to three cards from your hand and no more than one card from each row. Typically, the wheel A2345 is the best low.

There are 970 possible combinations for the player's hand.

The median high hand was an Ace-High Flush. There is a 5% chance of having quads or better, and about a 48% chance of a Full House or better. There is about a 95% chance of a Full House or better with five players.

Regarding low hands, the median low hand was a Seven-Six low. There is about a 12% chance of getting a five low, about a 35% chance of getting a six low or better. There is almost an 85% chance of a 6-low or better with five players.

This game is generally played with a Full-House as the high qualifier and Six-Low as the low.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | AKJT9 Flush | 7632A |
| Five | 999KK Full House | 6542A |

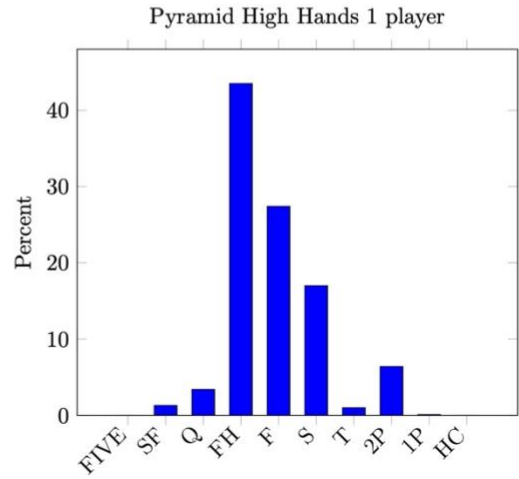
*For a qualifying high hand, the board must contain at least one repeated rank across different rows. Thus, a high hand is impossible only when every rank appearing on the board is confined to a single row. That turns out to be quite rare: the probability that **no qualifying high hand is possible** is about **0.07%**, or roughly **1 in 1,433** deals.*

*For a qualifying low hand, the requirement is a **six-low or better**, so the relevant low cards are only **A, 2, 3, 4, 5, 6**. Because a player may use at most three cards from their hand, at least two board cards must contribute to the low; therefore, at least **two different rows** must each contain a six-or-lower card. The probability that **no qualifying low hand is possible** is about **0.046%**, or roughly **1 in 2,198** deals.*

NOTE ON SOME POKER VARIATIONS

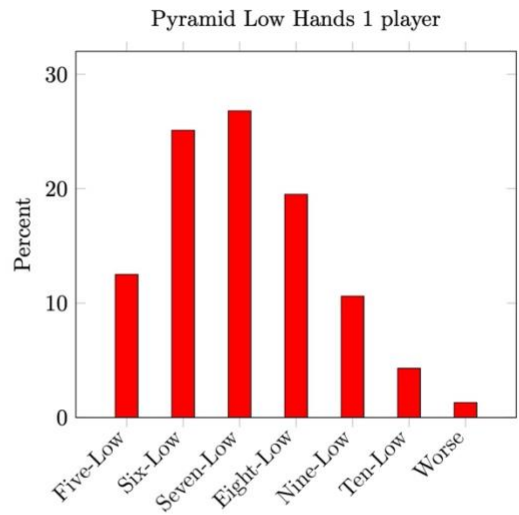
Pyramid High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.3 |
| Quads | 3.4 |
| Full House | 43.5 |
| Flush | 27.4 |
| Straight | 17.0 |
| Trips | 1.0 |
| Two Pair | 6.4 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



Pyramid Low Hands 1 player

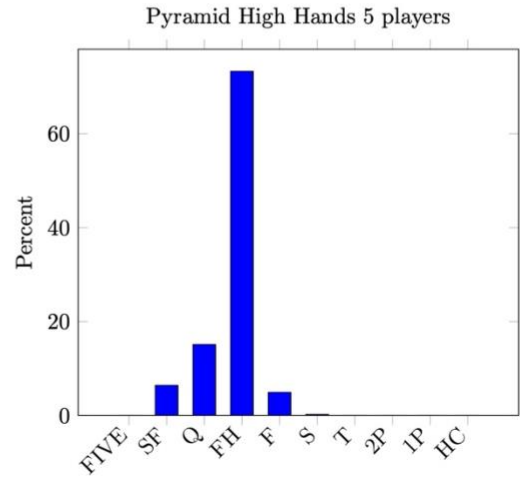
| Rank | Percent |
|-----------|---------|
| Five-Low | 12.5 |
| Six-Low | 25.1 |
| Seven-Low | 26.8 |
| Eight-Low | 19.5 |
| Nine-Low | 10.6 |
| Ten-Low | 4.3 |
| Worse | 1.3 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

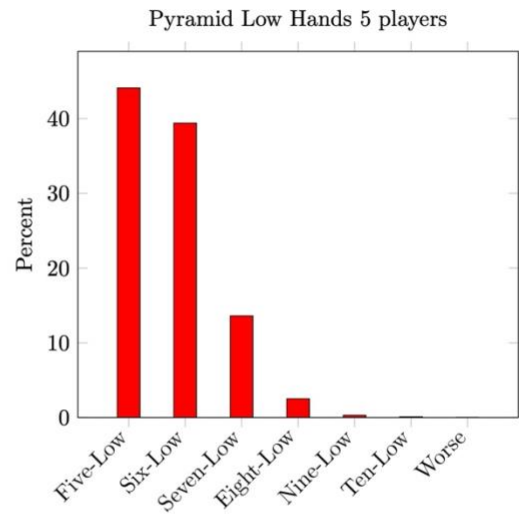
Pyramid High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 6.4 |
| Quads | 15.1 |
| Full House | 73.3 |
| Flush | 4.9 |
| Straight | 0.2 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Pyramid Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 44.1 |
| Six-Low | 39.4 |
| Seven-Low | 13.6 |
| Eight-Low | 2.5 |
| Nine-Low | 0.3 |
| Ten-Low | 0.1 |
| Worse | 0.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

RAILROAD

Deal five cards to each player and set up ten table cards face down in two rows of five. Players must create their best five-card high and low hands using one of the following:

- Two cards from their hand and three cards from one of the two rows.
- Three cards from their hand and one of the two-card columns.

The wheel plays, making 5432A the best possible low hand.

There are 250 possible card combinations to form hands in this game.

Sometimes a qualifying rule is applied: to win low, the low hand must be 8-Low or better. Statistics are shown for games without qualifiers in case they are relaxed.

The median player's high hand is a King-High Straight, while the median low hand is 8532A. There is almost a 25% chance of a Full House or better, and a 6% chance of a Five-Low.

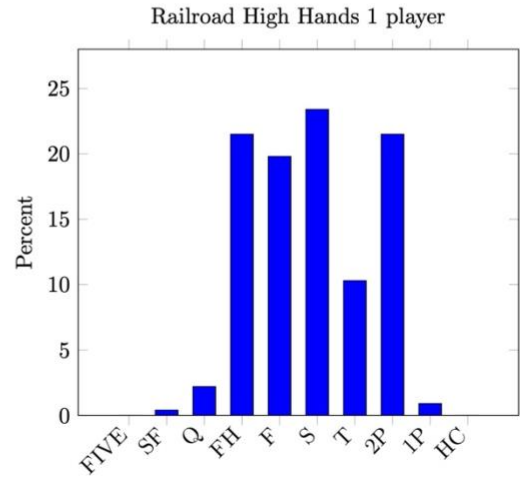
With five players, the median high hand shifts to Eights Full, and the median low hand to 6542A. There is a 12% chance of Quads or better, and a 70% chance of a Full-House or better. There is almost a 25% chance that at least one player has a Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | KQJT9 Straight | 8532A |
| Five | 88899 Full House | 6542A |

NOTE ON SOME POKER VARIATIONS

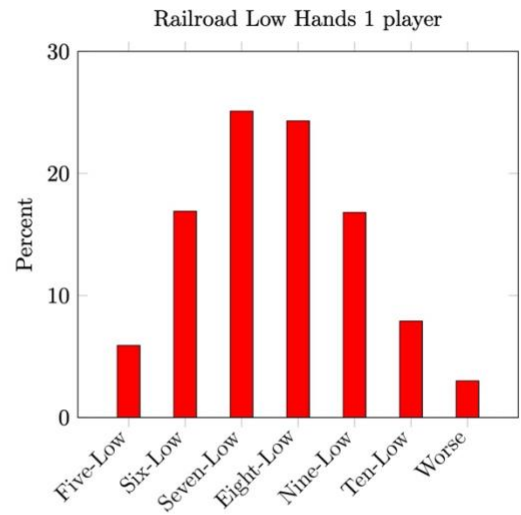
Railroad High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.4 |
| Quads | 2.2 |
| Full House | 21.5 |
| Flush | 19.8 |
| Straight | 23.4 |
| Trips | 10.3 |
| Two Pair | 21.5 |
| One Pair | 0.9 |
| High Card | 0.0 |
| Total | 100.0 |



Railroad Low Hands 1 player

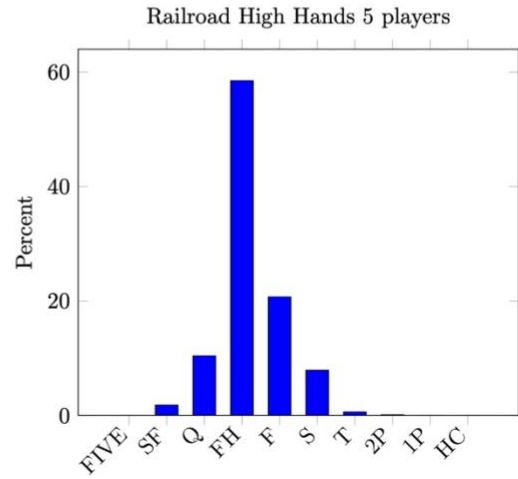
| Rank | Percent |
|-----------|---------|
| Five-Low | 5.9 |
| Six-Low | 16.9 |
| Seven-Low | 25.1 |
| Eight-Low | 24.3 |
| Nine-Low | 16.8 |
| Ten-Low | 7.9 |
| Worse | 3.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

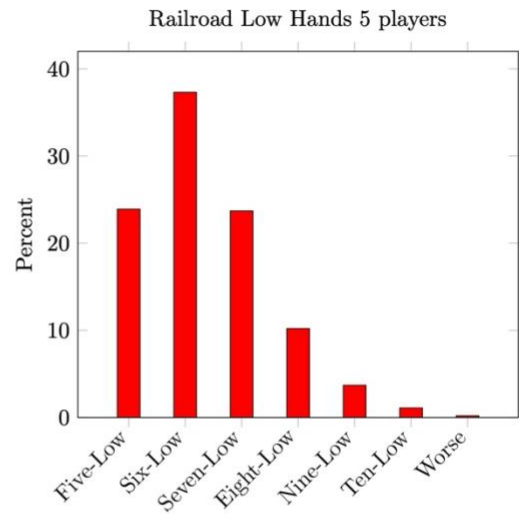
Railroad High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.8 |
| Quads | 10.4 |
| Full House | 58.5 |
| Flush | 20.7 |
| Straight | 7.9 |
| Trips | 0.6 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Railroad Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 23.9 |
| Six-Low | 37.3 |
| Seven-Low | 23.7 |
| Eight-Low | 10.2 |
| Nine-Low | 3.7 |
| Ten-Low | 1.1 |
| Worse | 0.2 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TWO FOUR EIGHT STRAIGHT (THE JOHN)

This game's name, Two-Four-Eight-Straight, nicely summarizes its key parameters.

Deal five cards to each player and five cards face down. Players must create their best five-card high and low hands using one of the following options: two cards from their hand plus three cards from the table, or four cards from their hand plus one table card. The wheel (5432A) is the best possible low hand. There are 125 possible card combinations in this game.

To win, a player's high hand must be at least a Straight, and the low hand must be 8-Low or better.

For one player, the median high and low hand was an Eight-High Straight. There is a 13% chance of a Full-House or better, and a 25% chance of a Flush or better.

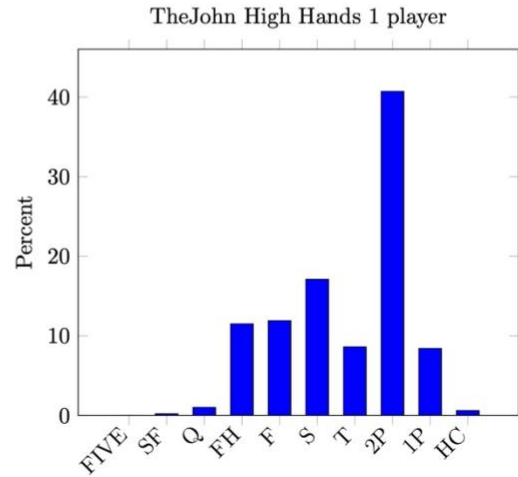
With five players, there is over a 45% chance of a Full House or better, and a 13% chance of a Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|----------------|------------|
| One | 87654 Straight | 87654 |
| Five | AKT53 Flush | 7542A |

NOTE ON SOME POKER VARIATIONS

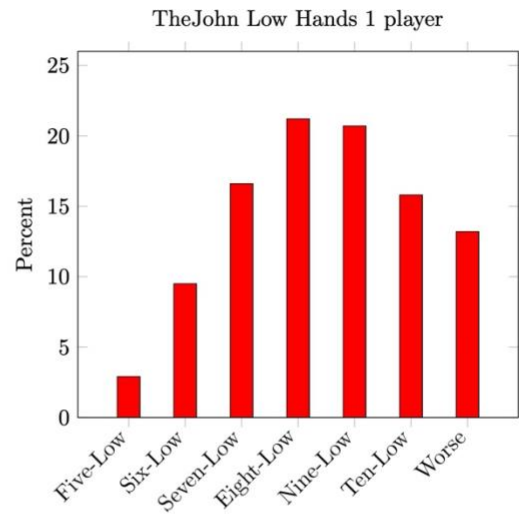
TheJohn High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.2 |
| Quads | 1.0 |
| Full House | 11.5 |
| Flush | 11.9 |
| Straight | 17.1 |
| Trips | 8.6 |
| Two Pair | 40.7 |
| One Pair | 8.4 |
| High Card | 0.6 |
| Total | 100.0 |



TheJohn Low Hands 1 player

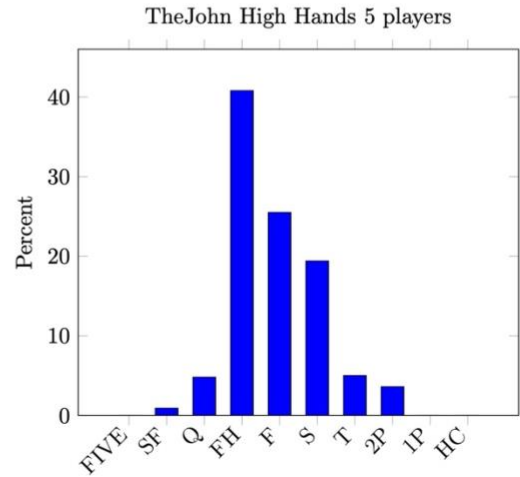
| Rank | Percent |
|-----------|---------|
| Five-Low | 2.9 |
| Six-Low | 9.5 |
| Seven-Low | 16.6 |
| Eight-Low | 21.2 |
| Nine-Low | 20.7 |
| Ten-Low | 15.8 |
| Worse | 13.2 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

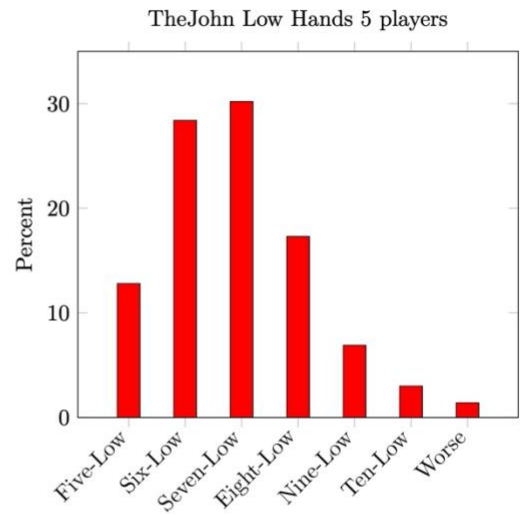
TheJohn High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.9 |
| Quads | 4.8 |
| Full House | 40.8 |
| Flush | 25.5 |
| Straight | 19.4 |
| Trips | 5.0 |
| Two Pair | 3.6 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TheJohn Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 12.8 |
| Six-Low | 28.4 |
| Seven-Low | 30.2 |
| Eight-Low | 17.3 |
| Nine-Low | 6.9 |
| Ten-Low | 3.0 |
| Worse | 1.4 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TIC-TAC-TOE

Deal five cards to each player. Then, lay out nine cards in a square grid, plus a tenth card on the side as a spit card. Make your best hand using up to three cards from your hand, combining them with cards from the grid vertically, horizontally, or diagonally, as well as the spit card.

Typically, the wheel is the best low. This game is usually played with a high qualifier of a Full House and a low qualifier of a Six-Low.

There are 690 possible combinations for a player's hand.

The median high hand was an Ace-High Flush. There is a 40% chance of having a full house or better.

With five players, the median high hand was Jacks Full. There is better than a 90% chance of a Full House or better.

Regarding low hands, the median low hand was a Seven-Six low. There is about a 10% chance of getting a Five Low, and about a 33% chance of getting a Six Low or better.

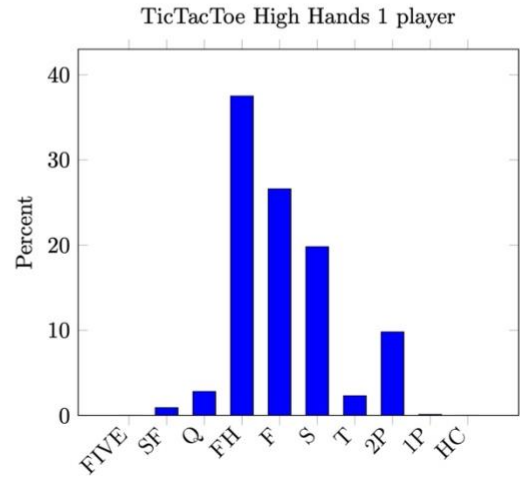
With five players, there is over an 80% chance of a Six-Low or better, and almost a 40% chance that at least one player has a Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | AJ974 Flush | 76432 |
| Five | JJJAA Full House | 6432A |

NOTE ON SOME POKER VARIATIONS

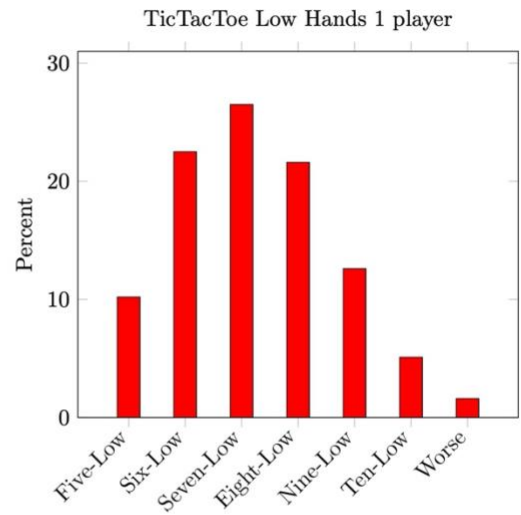
TicTacToe High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.9 |
| Quads | 2.8 |
| Full House | 37.5 |
| Flush | 26.6 |
| Straight | 19.8 |
| Trips | 2.3 |
| Two Pair | 9.8 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



TicTacToe Low Hands 1 player

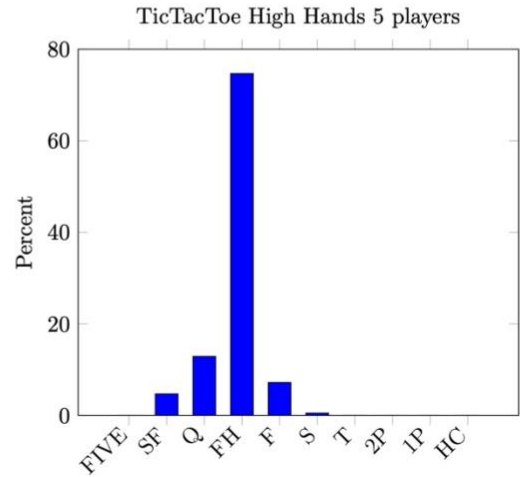
| Rank | Percent |
|-----------|---------|
| Five-Low | 10.2 |
| Six-Low | 22.5 |
| Seven-Low | 26.5 |
| Eight-Low | 21.6 |
| Nine-Low | 12.6 |
| Ten-Low | 5.1 |
| Worse | 1.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

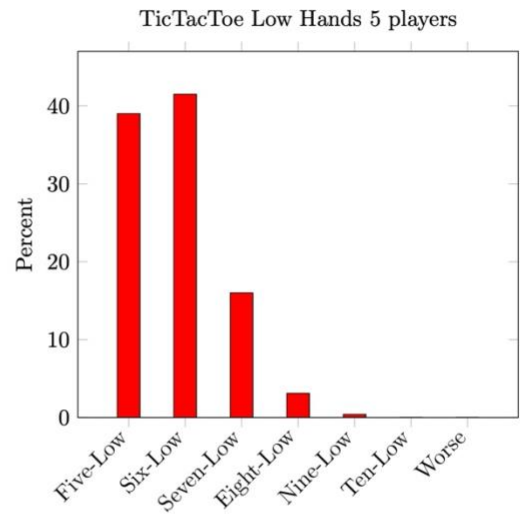
TicTacToe High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 4.7 |
| Quads | 12.9 |
| Full House | 74.7 |
| Flush | 7.2 |
| Straight | 0.5 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TicTacToe Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 39.0 |
| Six-Low | 41.5 |
| Seven-Low | 16.0 |
| Eight-Low | 3.1 |
| Nine-Low | 0.4 |
| Ten-Low | 0.0 |
| Worse | 0.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TWO THREE ALL

Deal five cards to each player, then a row of five cards. Make your best five-card hand using two, three, or all five cards in your hand together with the complementary number of cards from the table. There are 201 possible combinations for the player's hand.

The median high hand was a Six-High Straight. There is over a 15% chance of a Full House or better, and almost a 35% chance of a Flush or better. A Full House or better occurs in almost 60% of five-player hands.

Regarding low hands, the median low hand was an Eight-Seven low. There is almost a 15% chance of a Six-Low or better.

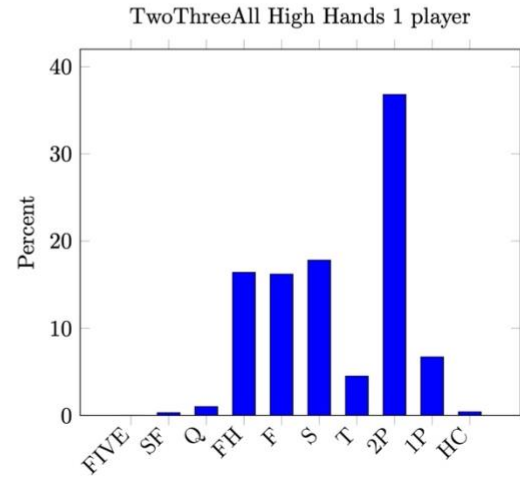
With five players, a Five-Low occurred over 15% of the time, and a Six-Low or better occurred almost half the time.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | 65432 Straight | 8763A |
| Five | 55544 Full House | 7432A |

NOTE ON SOME POKER VARIATIONS

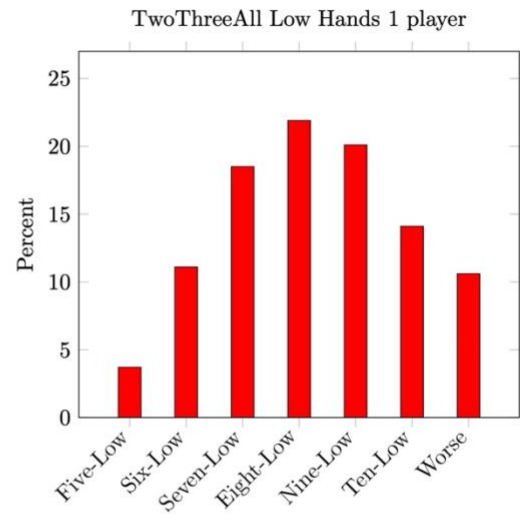
TwoThreeAll High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 1.0 |
| Full House | 16.4 |
| Flush | 16.2 |
| Straight | 17.8 |
| Trips | 4.5 |
| Two Pair | 36.8 |
| One Pair | 6.7 |
| High Card | 0.4 |
| Total | 100.0 |



TwoThreeAll Low Hands 1 player

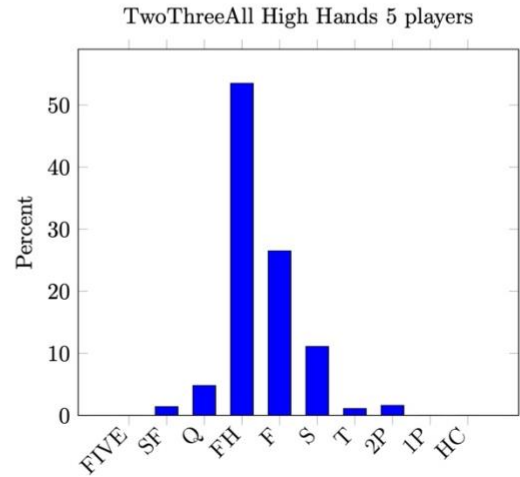
| Rank | Percent |
|-----------|---------|
| Five-Low | 3.7 |
| Six-Low | 11.1 |
| Seven-Low | 18.5 |
| Eight-Low | 21.9 |
| Nine-Low | 20.1 |
| Ten-Low | 14.1 |
| Worse | 10.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

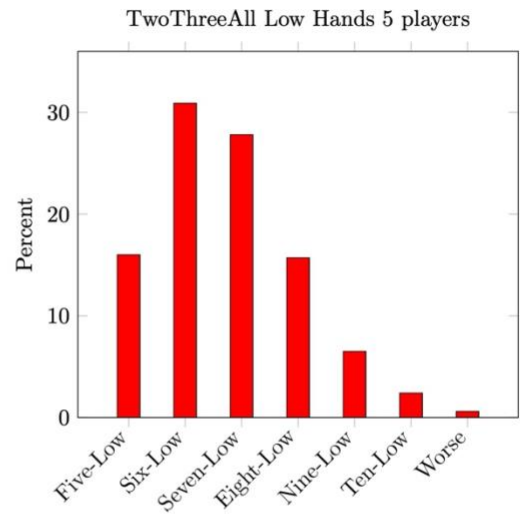
TwoThreeAll High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.4 |
| Quads | 4.8 |
| Full House | 53.5 |
| Flush | 26.5 |
| Straight | 11.1 |
| Trips | 1.1 |
| Two Pair | 1.6 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



TwoThreeAll Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 16.0 |
| Six-Low | 30.9 |
| Seven-Low | 27.8 |
| Eight-Low | 15.7 |
| Nine-Low | 6.5 |
| Ten-Low | 2.4 |
| Worse | 0.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

BLOODY TOWER

Bloody Tower is a poker variation in which each player is dealt five cards, and two columns of five community cards are placed face down. In one column, the final card is rotated 90 degrees to mark it as a special card. After the initial deal, there is a betting round. Next, three cards from each column are turned face up, followed by another betting round. Then, a fourth card in each column is revealed, followed by another betting round. Finally, the last row of both columns is turned face up, and it is here that the special card determines the outcome.

In the column containing the special card, only the cards that share its color (red or black) remain in play; all others are discarded. In the other column, only the cards of the opposite color to the special card are kept; the rest are removed.

After the designated cards are removed, a final round of betting takes place, followed by the showdown. Each player then constructs their best five-card high hand and best five-card low hand by combining cards from their own hand with any remaining community cards. The pot is split between the best high hand and the best qualifying low hand. It is common to have a rule that a low hand must be an “eight-low or better” to qualify; if no player meets this requirement, the entire pot is awarded to the high-hand winner.

The number of community cards that remain in play can range from as many as ten to as few as one. In practice, however, these extremes are very rare. The table below gives the probability of various numbers of community cards remaining after the final card is shown, along with the number of possible hands the player can make.

| Community Cards | Approximate Probability | Number of Hands |
|-----------------|-------------------------|-----------------|
| 1 | 0.2% | 6 |
| 2 | 2% | 21 |
| 3 | 7% | 56 |
| 4 | 16% | 126 |
| 5 | 24% | 252 |
| 6 | 24% | 462 |
| 7 | 16% | 792 |
| 8 | 7% | 1287 |

NOTE ON SOME POKER VARIATIONS

| | | |
|----|------|------|
| 9 | 2% | 2002 |
| 10 | 0.2% | 3003 |

As shown in the table, nearly half the time the game ends with five or six community cards in play, and about 80% of the time the number falls between four and seven.

When assessing the strength of a hand during play, it's crucial to remember that in any column containing two cards of different colors, only one will survive to the end. Also, the average hand strength clearly increases with the number of community cards. But keep in mind that a player may already have a pat hand and is therefore immune to the removal of any community cards.

For analysis, it comes down to evaluating the strengths of five-card poker hands drawn from a random sample of 9 to 12 cards. Assuming five players in the showdown, the hand strengths were as follows:

| Bloody Tower Five Player Simulation | | | | |
|--|------------------|-------------------|-------------------|-------------------|
| Community Cards | 4 | 5 | 6 | 7 |
| Best Hand and Frequency | | | | |
| Straight Flush | 1% | 2% | 3% | 5% |
| Four of a Kind | 3% | 5% | 7% | 10% |
| Full House | 43% | 58% | 69% | 74% |
| Flush | 27% | 25% | 18% | 10% |
| Straight | 17% | 8% | 3% | 1% |
| Trips | 3% | 1% | 0% | 0% |
| Two Pair | 7% | 1% | 0% | 0% |
| Median High Hand | Ace Flush | Sixes Full | Nines Full | Jacks Full |
| Five Low | 11% | 17% | 24% | 32% |
| Six Low | 27% | 33% | 37% | 39% |
| Seven Low | 30% | 29% | 26% | 21% |
| Eight Low | 9% | 15% | 10% | 6% |
| No Low | 13% | 6% | 3% | 2% |
| Median Low Hand | 7632A | 65432 | 6542A | 6532A |

NOTE ON SOME POKER VARIATIONS

SEVEN TWENTY-SEVEN

This game has more in common with Blackjack than Poker. The goal is to create a hand with a point value as close as possible to 7 (to win low) or 27 (to win high). Picture cards (Jacks, Kings, and Queens) are worth one-half point each, Aces are worth one or eleven points at the player's discretion, and all other cards are worth their rank.

Each player initially receives three cards: two face-down and one face-up. There is a round of betting, and then the dealer asks each player in turn if they wish to receive another card. If any player takes a card (dealt face up), there is another round of betting after all players have had an opportunity to act. A player may elect to take or not take a card in any round, though some variations place limits on one's ability to refuse cards and then take cards later.

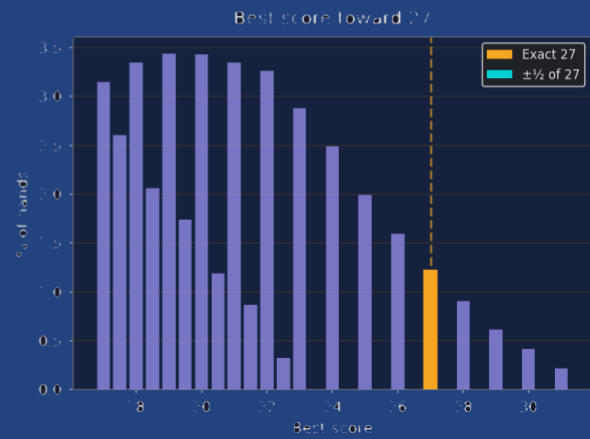
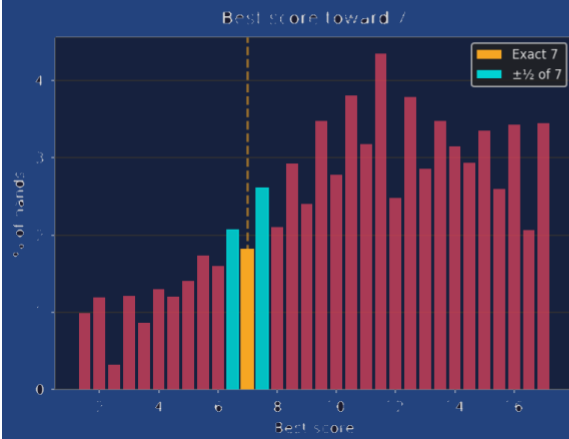
Play ceases when no player takes a card; at that point, hands are exposed and compared in a showdown. The player whose hand total is closest to 7 wins low, and the player whose total is nearest to 27 wins high. If hands differ equally from 7 or 27, under beats over (for example, 6.5 beats 7.5). The pot is split evenly between the best high and best low (any odd chip goes to the high-hand winner). Further splits can occur when there are tied winning hands (multiple high or low winners). Of course, a player can win both high and low with a hand like Ace, Ace, and Five, totaling 7 and 27.

Betting can be aggressive in this game, particularly when one player has a lock on the best low hand and will bet or raise every round. It is also not uncommon for players to bluff a better low hand than they have if their visible cards allow it.

Regarding hand distribution, approximately 3% of the time a player is dealt 7 or 27, and about 7.5% of the time a hand is no more than half a point away from 7 or 27. If play continues for two rounds, there is a 15% chance that one of the five players has a perfect score, and over a 40% chance that someone has a hand no more than half a point away from 7 or 27.

NOTE ON SOME POKER VARIATIONS

Seven Twenty-Seven - Hand Distribution (1 M simulated deals, 6 players)



| Event | Per-hand probability | P(≥1 of 6 players) |
|--------------------|----------------------|--------------------|
| Exactly 7 | 1.8150% | 10.4078% |
| Exactly 27 | 1.2202% | 7.1016% |
| Perfect (7 AND 27) | 0.1093% | 0.6539% |
| Within ½ of 7 | 6.4889% | 33.1381% |
| Within ½ of 27 | 1.2202% | 7.1016% |

NOTE ON SOME POKER VARIATIONS

THREE CARD TRIPLE HARVEY

Deal five cards to each player, and three rows of five cards face down. Make your best hand using exactly three cards from your hand, along with two cards from one of the three rows. The wheel is the best low. There are 300 possible combinations for the player's hand.

The median high hand was a King-High Straight. There is a 25% chance of a Full House or better, and almost a 45% chance of a Flush or better. There is over a 12% chance of Quads or better with five players.

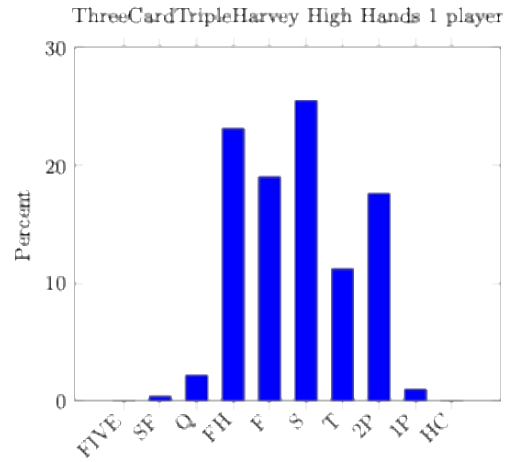
Regarding low hands, the median low hand was an Eight-Six low. There is about a 20% chance of getting a Six-Low or better and about a 40% chance of getting a Seven-Low or better. There is almost a 30% chance of a Five-Low with five players.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | KQJT9 Straight | 8652A |
| Five | 999QQ Full House | 6532A |

NOTE ON SOME POKER VARIATIONS

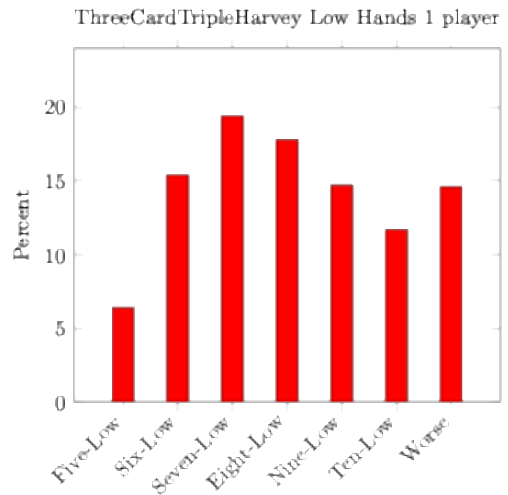
ThreeCardTripleHarvey High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.4 |
| Quads | 2.2 |
| Full House | 23.1 |
| Flush | 19.0 |
| Straight | 25.5 |
| Trips | 11.2 |
| Two Pair | 17.6 |
| One Pair | 1.0 |
| High Card | 0.0 |
| Total | 100.0 |



ThreeCardTripleHarvey Low Hands 1 player

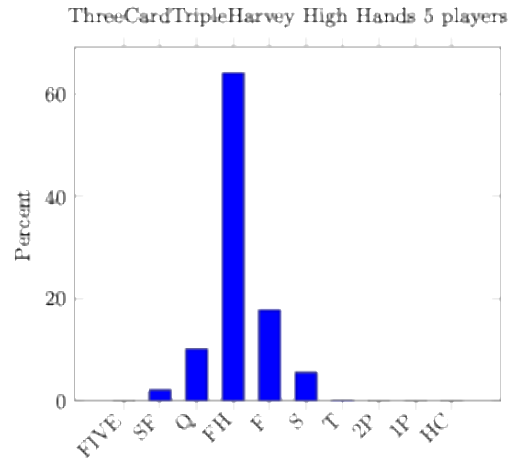
| Rank | Percent |
|-----------|---------|
| Five-Low | 6.4 |
| Six-Low | 15.4 |
| Seven-Low | 19.4 |
| Eight-Low | 17.8 |
| Nine-Low | 14.7 |
| Ten-Low | 11.7 |
| Worse | 14.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

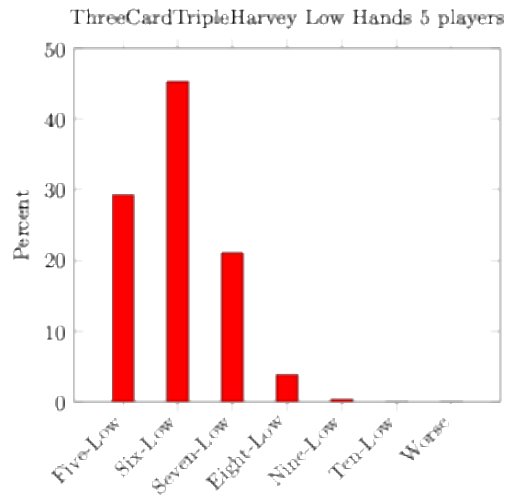
ThreeCardTripleHarvey High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.2 |
| Quads | 10.2 |
| Full House | 64.0 |
| Flush | 17.8 |
| Straight | 5.6 |
| Trips | 0.2 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



ThreeCardTripleHarvey Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 29.3 |
| Six-Low | 45.3 |
| Seven-Low | 21.1 |
| Eight-Low | 3.9 |
| Nine-Low | 0.4 |
| Ten-Low | 0.0 |
| Worse | 0.0 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

OMAHA-8

Deal four cards to each player and a row of five cards face down. Make your best hand with two cards from your hand and three cards from the table. There are 60 possible combinations for the player's hand. To win low, the hand must be an 8-Low or better.

The median high hand was two pair, Queens over Fives. There is a 7% chance of a full house or better, a 13% chance of a flush or better, and about a 25% chance of a straight or better.

With five players, the median high was an Ace high straight (Broadway). A full house or better occurred in about 27% of hands with five players.

Regarding low hands, the median low hand was a Nine-Eight Low, which would fail to qualify for low. There is about an 18% chance of getting a Seven-Low or better, and about a 35% chance of getting an Eight-Low or better.

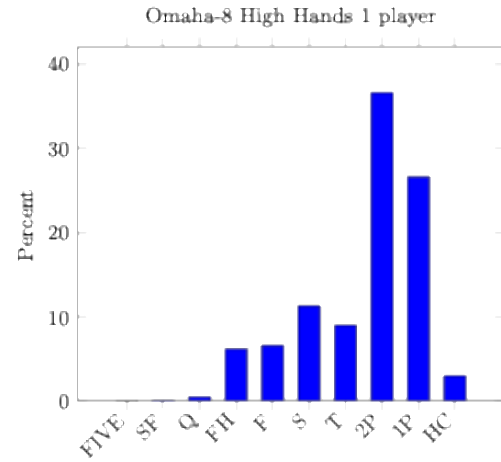
With five players, the median low hand was 8643A. A Six-Low or better occurs in about 23% of hands with five players.

| Number of Players | Median High | Median Low |
|-------------------|----------------|----------------|
| One | QQ55T Two Pair | 98643 (No Low) |
| Five | AKQJT Straight | 8643A |

NOTE ON SOME POKER VARIATIONS

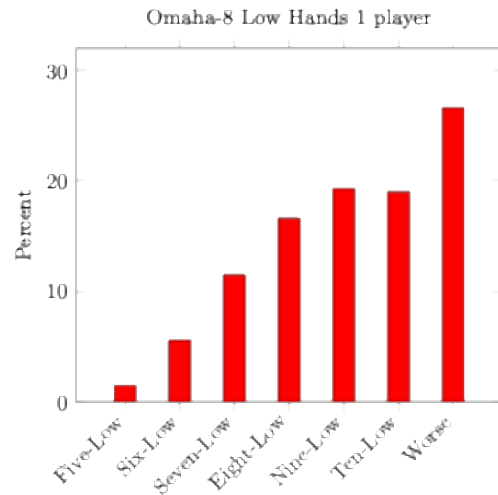
Omaha-8 High Hands 1 player

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.1 |
| Quads | 0.5 |
| Full House | 6.2 |
| Flush | 6.6 |
| Straight | 11.3 |
| Trips | 9.0 |
| Two Pair | 36.6 |
| One Pair | 26.6 |
| High Card | 3.0 |
| Total | 100.0 |



Omaha-8 Low Hands 1 player

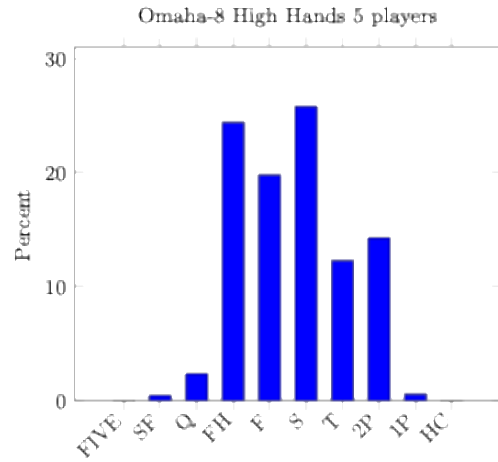
| Rank | Percent |
|-----------|---------|
| Five-Low | 1.5 |
| Six-Low | 5.6 |
| Seven-Low | 11.5 |
| Eight-Low | 16.6 |
| Nine-Low | 19.3 |
| Ten-Low | 19.0 |
| Worse | 26.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

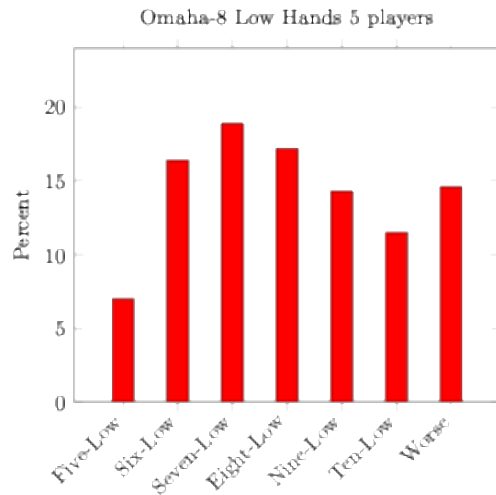
Omaha-8 High Hands 5 players

| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.4 |
| Full House | 24.4 |
| Flush | 19.8 |
| Straight | 25.8 |
| Trips | 12.3 |
| Two Pair | 14.3 |
| One Pair | 0.6 |
| High Card | 0.0 |
| Total | 100.0 |



Omaha-8 Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 7.0 |
| Six-Low | 16.4 |
| Seven-Low | 18.9 |
| Eight-Low | 17.2 |
| Nine-Low | 14.3 |
| Ten-Low | 11.5 |
| Worse | 14.6 |
| Total | 100.0 |



NOTE ON SOME POKER VARIATIONS

TRIPLE HARVEY WITH INDICATOR WILD

Deal five cards to each player and then arrange three rows of five cards face down. Place an additional card to indicate which rank is wild; this indicator card cannot be used in any hand, so there are three wild cards available in total. Players must form their best hand using two cards from their hand, along with three cards from one of the rows. The wheel is considered the best low hand. There are 300 possible combinations for a player's hand.

In the simulation, the median high hand was Jacks Full over Aces. A straight flush or better will appear around 10% of the time, while Quads or better occur over 35% of the time. With five players, the median high hand was Four Kings, and there is more than a 40% chance of getting a Straight Flush or better.

Regarding low hands, the median low was 7532A. There is greater than a 20% chance of getting a Five Low, and about a 45% chance of getting a Six Low or better. With five players, there is over a 50% chance of someone having Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|-----------------|------------|
| One | JJAA Full House | 7532A |
| Five | KKKKQ | 5432A |

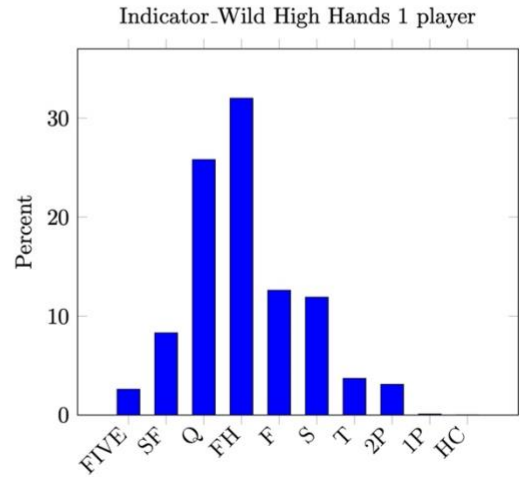
Of particular interest is the distribution of the wild cards, keeping in mind that a player fortunate enough to have two of them in their hand has an automatic lock on at least sharing both the high and low pot. The chance of this is between and 11% and 16%, depending upon whether there are five or seven players.

| Event | 5 players Probability | 7 players Probability |
|--|--------------------------|--------------------------|
| No player has any of the 3 wild cards | 12.5% | 2.7% |
| Exactly 1 of the 3 wild cards is in players' hands | 39.0% | 20.2% |
| Exactly 2 of the 3 wild cards are in players' hand | 37.5% | 47.1% |
| All 3 wild cards are in players' hands | 11.0% | 30.1% |
| Some player has at least 2 wild cards | 11.3% | 15.8% |
| Three different players each have 1 wild card | 6.0% | 21.0% |

NOTE ON SOME POKER VARIATIONS

Indicator_Wild High Hands 1 player

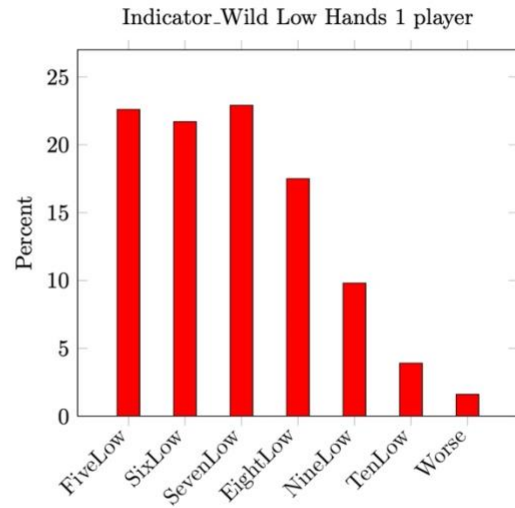
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 2.6 |
| Straight Flush | 8.3 |
| Quads | 25.8 |
| Full House | 32.0 |
| Flush | 12.6 |
| Straight | 11.9 |
| Trips | 3.7 |
| Two Pair | 3.1 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: JJJAA-Jacks Full over Aces

Indicator_Wild Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 22.6 |
| Six-Low | 21.7 |
| Seven-Low | 22.9 |
| Eight-Low | 17.5 |
| Nine-Low | 9.8 |
| Ten-Low | 3.9 |
| Worse | 1.6 |
| Total | 100.0 |

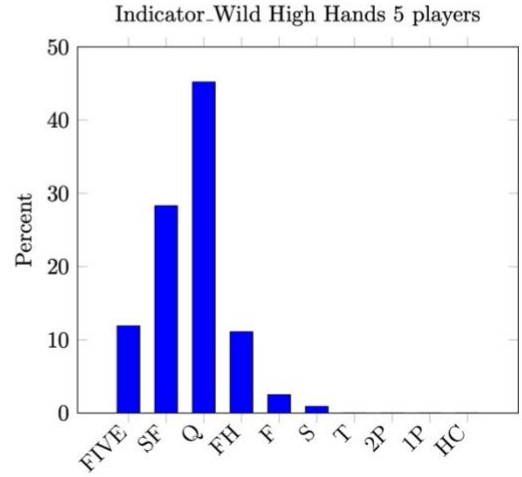


Median Low Hand: 7-low:A2357

NOTE ON SOME POKER VARIATIONS

Indicator_Wild High Hands 5 players

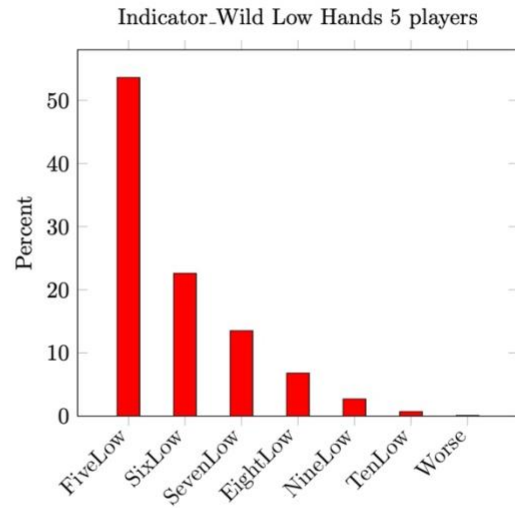
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 11.9 |
| Straight Flush | 28.3 |
| Quads | 45.2 |
| Full House | 11.1 |
| Flush | 2.5 |
| Straight | 0.9 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: KKKKQ-Four Kings

Indicator_Wild Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 53.6 |
| Six-Low | 22.6 |
| Seven-Low | 13.5 |
| Eight-Low | 6.8 |
| Nine-Low | 2.7 |
| Ten-Low | 0.7 |
| Worse | 0.1 |
| Total | 100.0 |



Median Low Hand: 5-low:A2345

NOTE ON SOME POKER VARIATIONS

TWO-EYED FACE CARDS WILD

This game is a variation of high/low seven-card stud featuring a shared “spit” card. The nine two-eyed face cards are wild (all except the Jack of Spades, Jack of Hearts, and King of Diamonds). Each player forms their best five-card high hand and best five-card low hand using any five of the eight cards available. There is about a 20% chance of not having a wild card.

Since there are so many wild cards available, strong hands are quite common. The median high hand with five players was quads, and the median low was a Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|-----------------|------------|
| One | JJAA Full House | 7432A |
| Five | KKKKQ | 5432A |

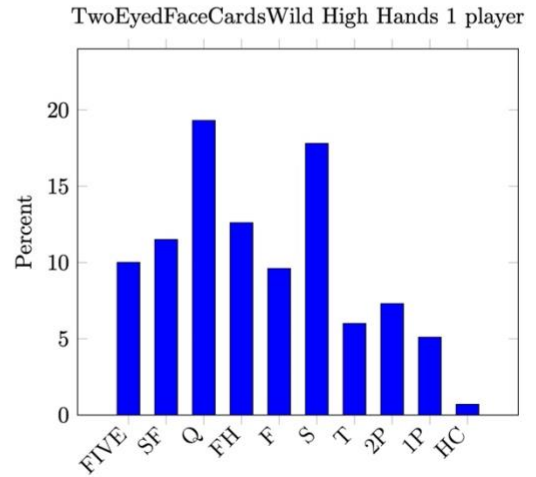
The table below shows the probability that exactly k of the five players can use two or more wild cards, counting the shared spit card if it is wild.

| Number of Players (k) | Probability k players have 2+ wild cards |
|---------------------------|--|
| Zero | 3.2% |
| One | 25.8% |
| Two | 40.8% |
| Three | 19.7% |
| Four | 8.4% |
| Five | 2.2% |

NOTE ON SOME POKER VARIATIONS

TwoEyedFaceCardsWild High Hands 1 player

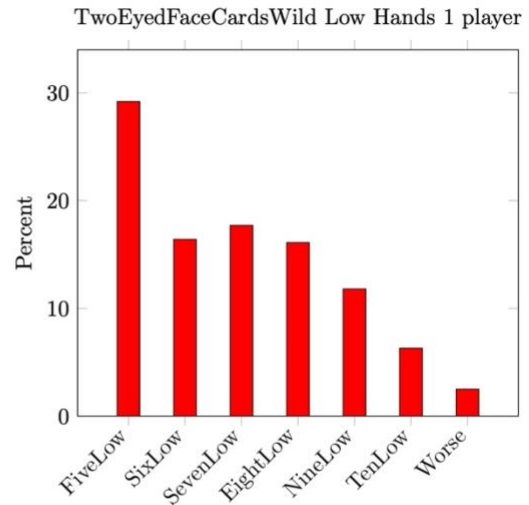
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 10.0 |
| Straight Flush | 11.5 |
| Quads | 19.3 |
| Full House | 12.6 |
| Flush | 9.6 |
| Straight | 17.8 |
| Trips | 6.0 |
| Two Pair | 7.3 |
| One Pair | 5.1 |
| High Card | 0.7 |
| Total | 100.0 |



Median High Hand: 77744-Sevens Full over Fours

TwoEyedFaceCardsWild Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 29.2 |
| Six-Low | 16.4 |
| Seven-Low | 17.7 |
| Eight-Low | 16.1 |
| Nine-Low | 11.8 |
| Ten-Low | 6.3 |
| Worse | 2.5 |
| Total | 100.0 |

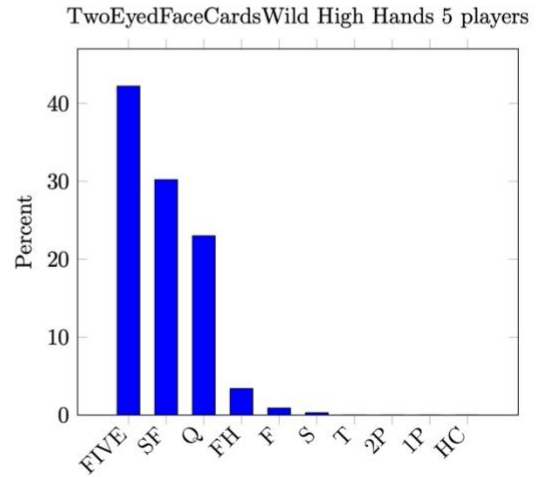


Median Low Hand: 7-low:A2347

NOTE ON SOME POKER VARIATIONS

TwoEyedFaceCardsWild High Hands 5 players

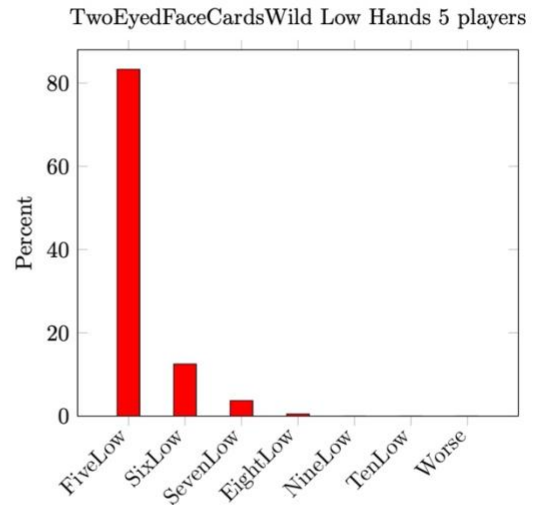
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 42.2 |
| Straight Flush | 30.2 |
| Quads | 23.0 |
| Full House | 3.4 |
| Flush | 0.9 |
| Straight | 0.3 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: JT987-Jack-High Straight Flush

TwoEyedFaceCardsWild Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 83.3 |
| Six-Low | 12.5 |
| Seven-Low | 3.7 |
| Eight-Low | 0.5 |
| Nine-Low | 0.0 |
| Ten-Low | 0.0 |
| Worse | 0.0 |
| Total | 100.0 |



Median Low Hand: 5-low:A2345

NOTE ON SOME POKER VARIATIONS

PICK YOUR OWN WILD CARD FOR HIGH

Each player receives seven cards and shares a common eighth card (the “spit”). Make your best hand using any five of the eight cards. The player may choose any rank card as wild to form a high hand. Low hands are natural. There are 56 possible combinations for the player’s hand.

The median high hand was Four Nines. There is about a 6% chance of Five of a Kind and over a 30% chance of a Straight Flush or better. Note that a Full House and Two Pairs are never optimal choices, the former being Five-of-a-Kind and the latter Quads.

Among five players, Five-of-a-Kind occurs almost 30% of the time, and a Straight Flush nearly 60% of the time.

Regarding low hands, assuming the wheel plays, the median low hand was a Ten-Low (which would not qualify if an Eight-Low or better is required. There is about a 5% chance of a six low, a 16% chance of a seven low or better, and about a 30% chance of an eight low or better.

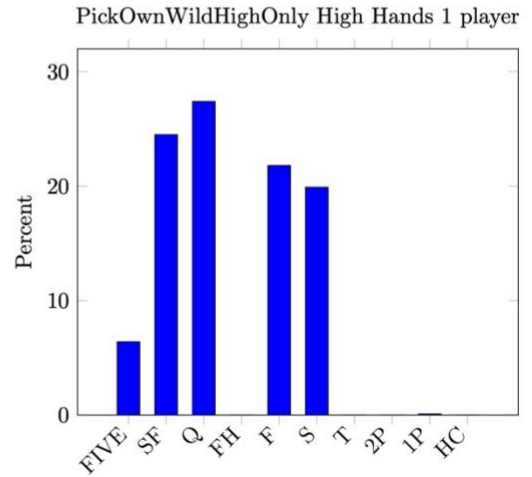
With five players, a Five-Low occurs about 6% of the time and a Six-Low about 20%.

| Number of Players | Median High | Median Low |
|-------------------|----------------------|------------|
| One | 9999A Quads | T542A |
| Five | KQJT9 Straight Flush | 7653A |

NOTE ON SOME POKER VARIATIONS

PickOwnWildHighOnly High Hands 1 player

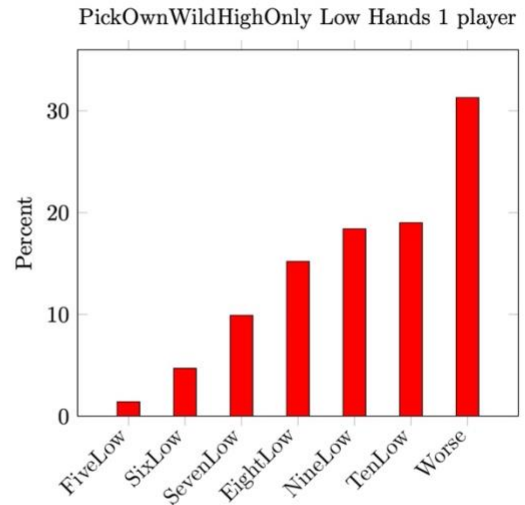
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 6.4 |
| Straight Flush | 24.5 |
| Quads | 27.4 |
| Full House | 0.0 |
| Flush | 21.8 |
| Straight | 19.9 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.1 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 9999A-Four Nines

PickOwnWildHighOnly Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 1.4 |
| Six-Low | 4.7 |
| Seven-Low | 9.9 |
| Eight-Low | 15.2 |
| Nine-Low | 18.4 |
| Ten-Low | 19.0 |
| Worse | 31.3 |
| Total | 100.0 |

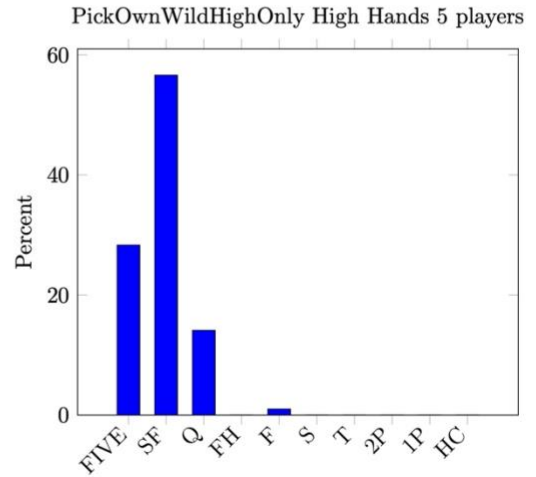


Median Low Hand: A245T

NOTE ON SOME POKER VARIATIONS

PickOwnWildHighOnly High Hands 5 players

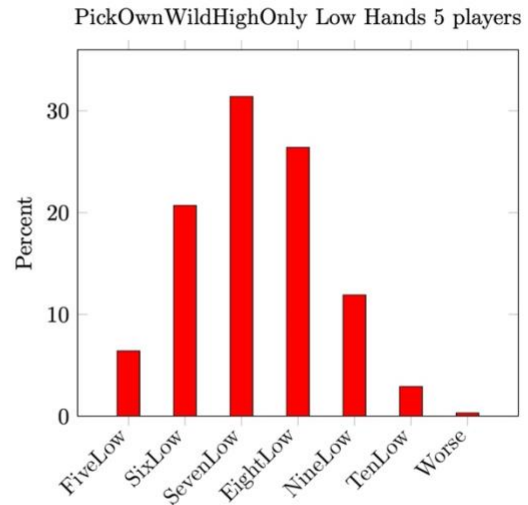
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 28.3 |
| Straight Flush | 56.6 |
| Quads | 14.1 |
| Full House | 0.0 |
| Flush | 1.0 |
| Straight | 0.0 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: KQJT9-King-High Straight Flush

PickOwnWildHighOnly Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 6.4 |
| Six-Low | 20.7 |
| Seven-Low | 31.4 |
| Eight-Low | 26.4 |
| Nine-Low | 11.9 |
| Ten-Low | 2.9 |
| Worse | 0.3 |
| Total | 100.0 |



Median Low Hand: 7-low:A3567

NOTE ON SOME POKER VARIATIONS

SIXTY-FOUR

Deal six cards to each player and then four table cards face down. Make your best 5-card high hand using any cards from your hand plus up to two cards from the table. Make your best 5-card low hand using any cards from your hand plus up to three cards from the table. The wheel does not play, so 6-4-3-2-A is the best low hand. There are 186 possible high hands and 246 possible low hands.

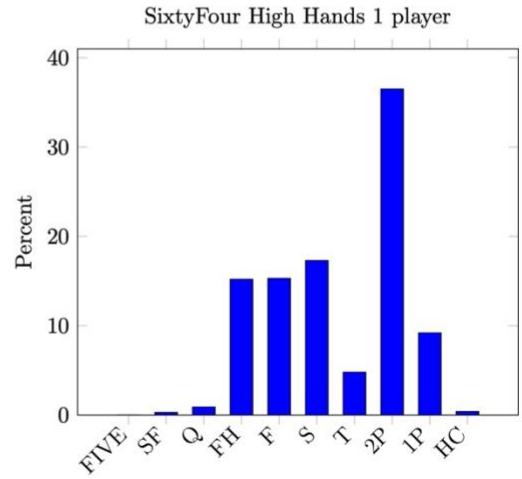
To qualify to win, your high hand must be trips or better, and your low hand must be 8-low or better. While an individual hand has about a 45% chance of not having a high or not having a low, with five players in the showdown, there is over a 60% chance of a full house or better and over a 40% chance of a six low.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | QQQKJ Trips | 8763A |
| Five | 55599 Full House | 7532A |

NOTE ON SOME POKER VARIATIONS

SixtyFour High Hands 1 player

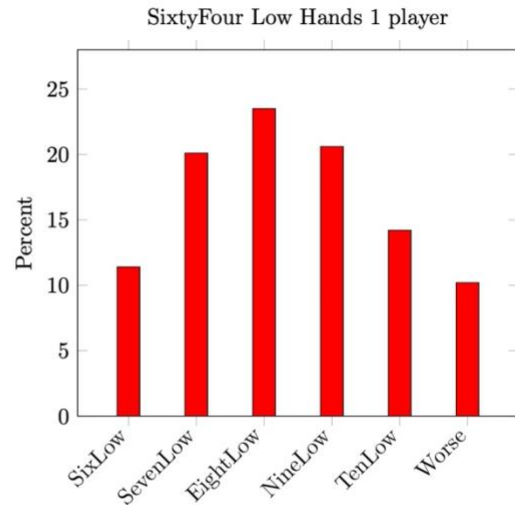
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 0.9 |
| Full House | 15.2 |
| Flush | 15.3 |
| Straight | 17.3 |
| Trips | 4.8 |
| Two Pair | 36.5 |
| One Pair | 9.2 |
| High Card | 0.4 |
| Total | 100.0 |



Median High Hand: QQQKJ-Three Queens

SixtyFour Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Six-Low | 11.4 |
| Seven-Low | 20.1 |
| Eight-Low | 23.5 |
| Nine-Low | 20.6 |
| Ten-Low | 14.2 |
| Worse | 10.2 |
| Total | 100.0 |

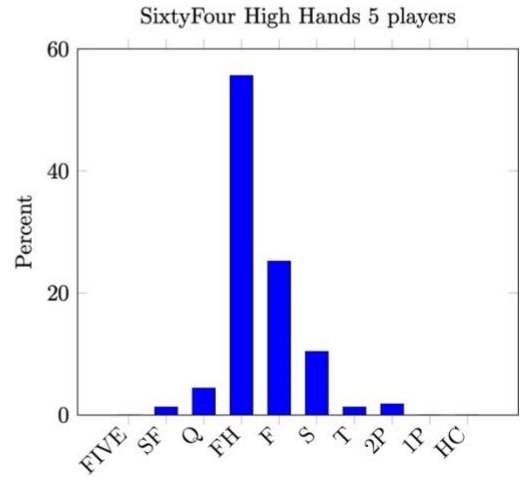


Median Low Hand: 8-low:A3678

NOTE ON SOME POKER VARIATIONS

SixtyFour High Hands 5 players

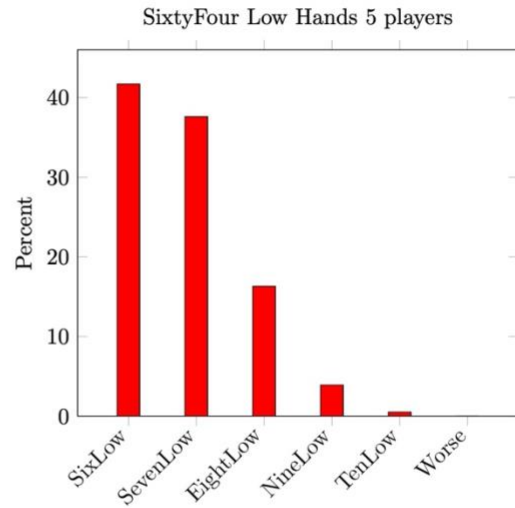
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.3 |
| Quads | 4.4 |
| Full House | 55.6 |
| Flush | 25.2 |
| Straight | 10.4 |
| Trips | 1.3 |
| Two Pair | 1.8 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 55599-Fives Full over Nines

SixtyFour Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Six-Low | 41.7 |
| Seven-Low | 37.6 |
| Eight-Low | 16.3 |
| Nine-Low | 3.9 |
| Ten-Low | 0.5 |
| Worse | 0.0 |
| Total | 100.0 |

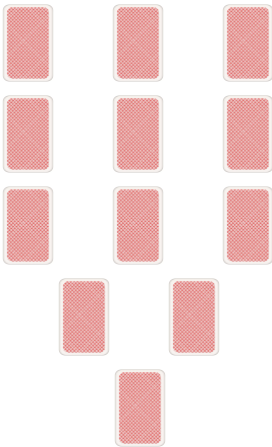


Median Low Hand: 7-low:A2357

NOTE ON SOME POKER VARIATIONS

AHA

Deal five cards to each player and then twelve table cards face down as follows: three rows of three across, a row of two across, and a single card at the bottom, as illustrated below.



Make your best 5-card hand using two from the cards dealt and three from the leftmost cards, the rightmost cards, or the middle column, in which case you can select either of the two cards in the second last row. There are 400 possible hand combinations. The low hand qualifier is an Eight-Low, and sometimes Trips are designated as a high hand qualifier. The best low is 6432A, and straights and flushes count against low hands.

With five players, there is over a 75% chance of a Full House or better, and over a 55% chance of a Six-Low.

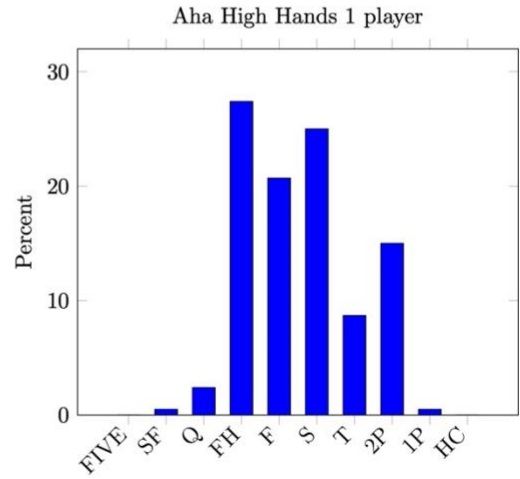
| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | T9542 Flush | 8432A |
| Five | TTT44 Full House | 6542A |

There is about a 7.5% chance that no low is possible, or about one in fourteen deals.

NOTE ON SOME POKER VARIATIONS

Aha High Hands 1 player

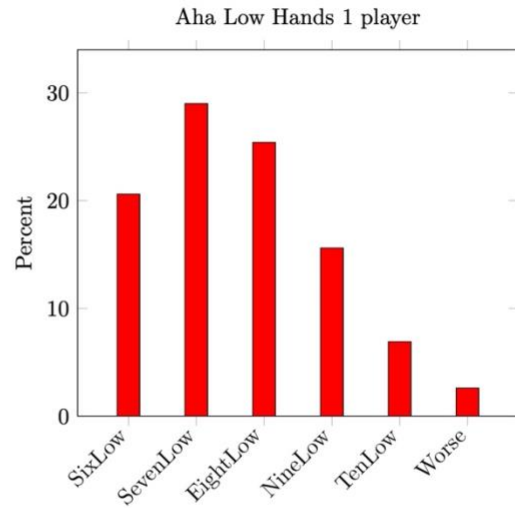
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.4 |
| Full House | 27.4 |
| Flush | 20.7 |
| Straight | 25.0 |
| Trips | 8.7 |
| Two Pair | 15.0 |
| One Pair | 0.5 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: T9542-Ten-High Flush

Aha Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Six-Low | 20.6 |
| Seven-Low | 29.0 |
| Eight-Low | 25.4 |
| Nine-Low | 15.6 |
| Ten-Low | 6.9 |
| Worse | 2.6 |
| Total | 100.0 |

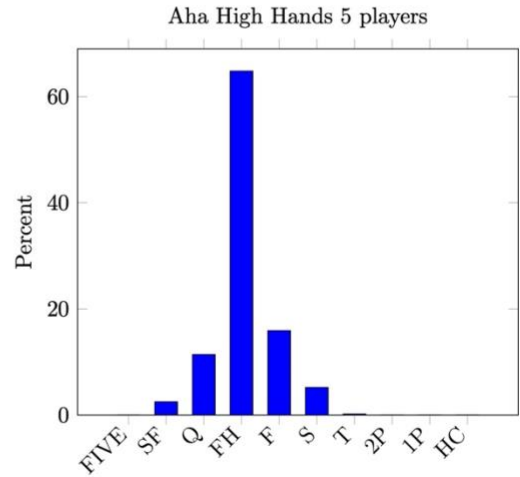


Median Low Hand: 8-low:A2348

NOTE ON SOME POKER VARIATIONS

Aha High Hands 5 players

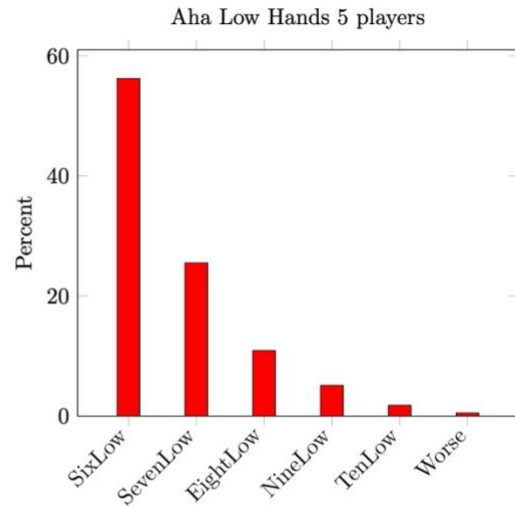
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.5 |
| Quads | 11.4 |
| Full House | 64.8 |
| Flush | 15.9 |
| Straight | 5.2 |
| Trips | 0.2 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: TTT44-Tens Full over Fours

Aha Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Six-Low | 56.2 |
| Seven-Low | 25.5 |
| Eight-Low | 10.9 |
| Nine-Low | 5.1 |
| Ten-Low | 1.8 |
| Worse | 0.5 |
| Total | 100.0 |



Median Low Hand: 6-low:A2456

NOTE ON SOME POKER VARIATIONS

DIME STORE

Each player receives seven private cards plus a shared eighth card (the "spit"). Make your best five-card hand from any combination of the eight available cards, with Fives and Tens as wild cards. This game traditionally uses a Five-Low as the best possible low hand. Any given player has 56 possible five-card combinations to choose from.

With eight wild cards in the deck, hands run dramatically stronger than in standard seven-card stud. Simulations with five players show a 33% chance that at least one player holds Five of a Kind, and better than a 60% chance that someone has a Straight Flush or better. On the low side, there's a 50% chance that at least one player achieves a perfect Five-Low.

| Number of Players | Median High | Median Low |
|-------------------|----------------------|------------|
| One | AKQJ2 Flush | 8732A |
| Five | T9876 Straight Flush | 5432A |

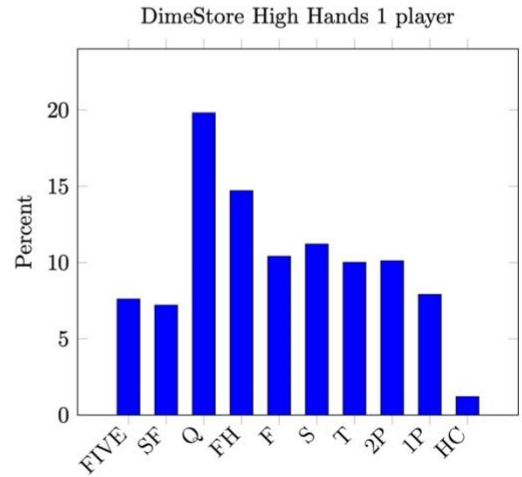
The table below shows the probability that exactly k of the five players can use two or more wild cards, counting the shared spit card if it is wild.

| Number of Players (k) | Probability k players have 2+ wild cards |
|-----------------------|--|
| Zero | 6.7% |
| One | 36.0% |
| Two | 37.2% |
| Three | 13.4% |
| Four | 5.7% |
| Five | 1.1% |

NOTE ON SOME POKER VARIATIONS

DimeStore High Hands 1 player

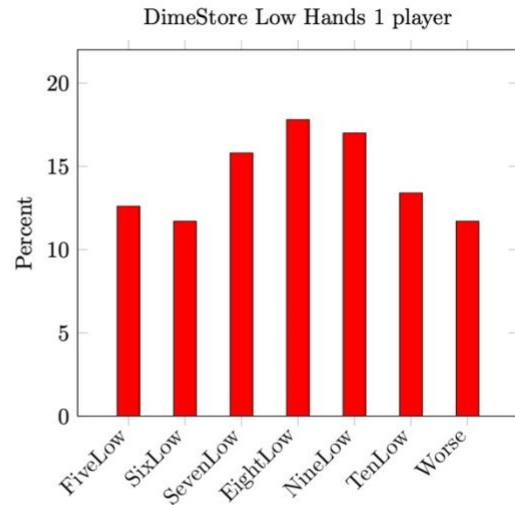
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 7.6 |
| Straight Flush | 7.2 |
| Quads | 19.8 |
| Full House | 14.7 |
| Flush | 10.4 |
| Straight | 11.2 |
| Trips | 10.0 |
| Two Pair | 10.1 |
| One Pair | 7.9 |
| High Card | 1.2 |
| Total | 100.0 |



Median High Hand: AKQJ2-Ace-High Flush

DimeStore Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 12.6 |
| Six-Low | 11.7 |
| Seven-Low | 15.8 |
| Eight-Low | 17.8 |
| Nine-Low | 17.0 |
| Ten-Low | 13.4 |
| Worse | 11.7 |
| Total | 100.0 |

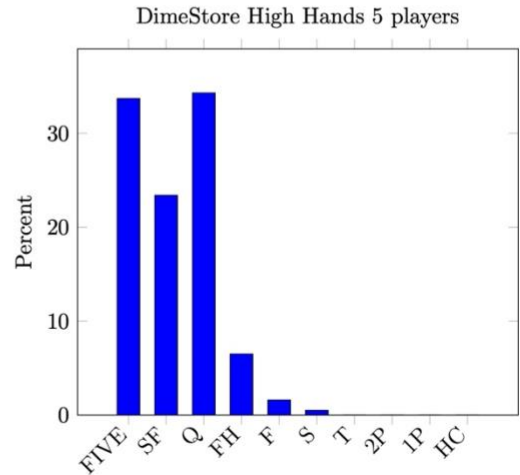


Median Low Hand: 8-low:A2378

NOTE ON SOME POKER VARIATIONS

DimeStore High Hands 5 players

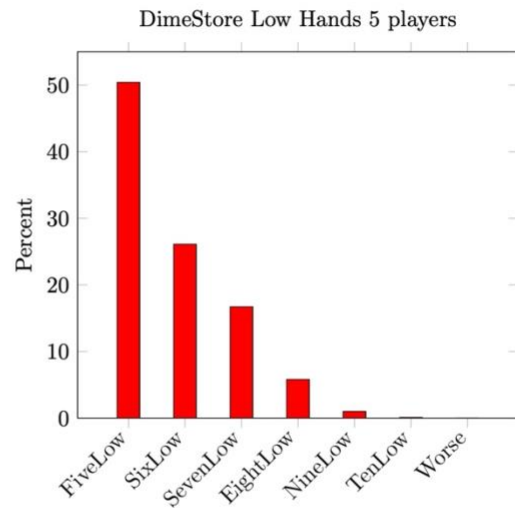
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 33.7 |
| Straight Flush | 23.4 |
| Quads | 34.3 |
| Full House | 6.5 |
| Flush | 1.6 |
| Straight | 0.5 |
| Trips | 0.0 |
| Two Pair | 0.0 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: T9876-Ten-High Straight Flush

DimeStore Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 50.4 |
| Six-Low | 26.1 |
| Seven-Low | 16.7 |
| Eight-Low | 5.8 |
| Nine-Low | 1.0 |
| Ten-Low | 0.1 |
| Worse | 0.0 |
| Total | 100.0 |



Median Low Hand: 5-low:A2345

NOTE ON SOME POKER VARIATIONS

THIRTEEN THIRTY-THREE

This is another game (like Seven Twenty-Seven) that has more in common with Blackjack than Poker. The goal is to create a hand with a point value as close as possible to 13 (to win low) or 33 (to win high). Picture cards (Jacks, Kings, and Queens) are worth one-half point each, Aces are worth one or eleven points at the player's discretion, and all other cards are worth their rank.

Each player initially receives three cards: two face-down and one face-up. There is a round of betting, and then the dealer asks each player in turn if they wish to receive another card. If any player takes a card (dealt face up), there is another round of betting after all players have had an opportunity to act. A player may elect to take or not take a card in any round, though some variations place limits on one's ability to refuse cards and then take cards later.

Play ceases when no player takes a card; at that point, hands are exposed and compared in a showdown. The player whose hand total is closest to 13 wins low, and the player whose total is nearest to 33 wins high. If hands equally differ from 13 or 33, under beats over (for example, 12.5 beats 13.5). The pot is split evenly between the best high and best low (any odd chip goes to the high-hand winner). Further splits can occur when there are tied winning hands (multiple high or low winners). Of course, a player can win both high and low with a hand like Ace, Ace, Ace, totaling 13 and 33.

With six players in the hand, there is over a 15% probability someone was dealt a perfect 13, and over a 50% probability someone was dealt a hand within a half point of 13. Chasing a better hand can be expensive if someone has a pat hand or a lock on low.

NOTE ON SOME POKER VARIATIONS



NOTE ON SOME POKER VARIATIONS

SEVEN CARD STUD WITH A SPIT

For a change, a traditional poker game! Each player receives seven private cards plus a shared eighth card (the "spit"). Make your best five-card hand from any combination of the eight available cards. This game can be played with or without a Five-Low as the best possible low hand. The tables below assume a Five-Low is valid. Any given player has 56 possible five-card combinations to choose from.

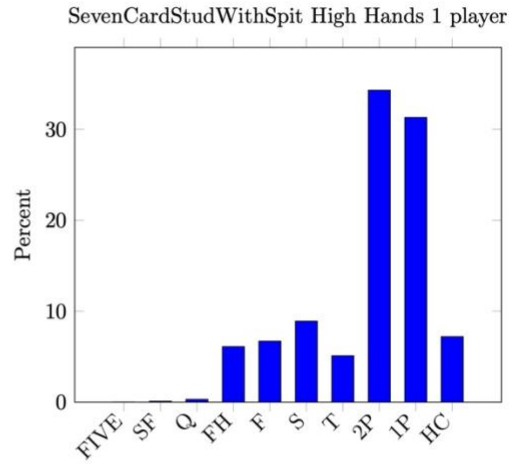
With five players, the median high hand was a Flush, and over 25% of the time someone will have a Full House or better. With respect to low hands, assuming five players, about 7% of the time someone will have a Five-Low and over 25% of the time a Six-Low or better.

| Number of Players | Median High | Median Low |
|-------------------|----------------|----------------|
| One | TT22A Two Pair | T5321 (No Low) |
| Five | T9532 Flush | 7653A |

NOTE ON SOME POKER VARIATIONS

SevenCardStudWithSpit High Hands 1 player

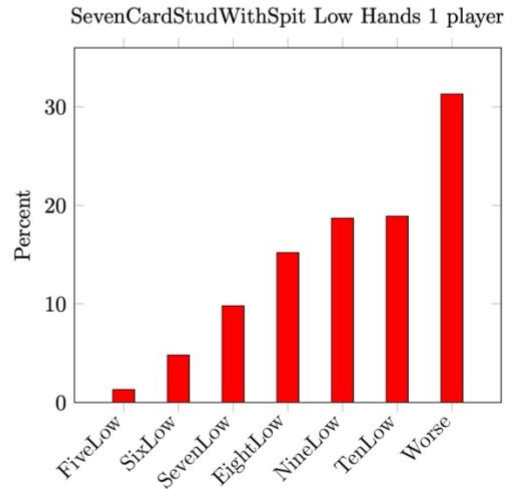
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.1 |
| Quads | 0.3 |
| Full House | 6.1 |
| Flush | 6.7 |
| Straight | 8.9 |
| Trips | 5.1 |
| Two Pair | 34.3 |
| One Pair | 31.3 |
| High Card | 7.2 |
| Total | 100.0 |



Median High Hand: TT22A-Tens and Deuces

SevenCardStudWithSpit Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 1.3 |
| Six-Low | 4.8 |
| Seven-Low | 9.8 |
| Eight-Low | 15.2 |
| Nine-Low | 18.7 |
| Ten-Low | 18.9 |
| Worse | 31.3 |
| Total | 100.0 |

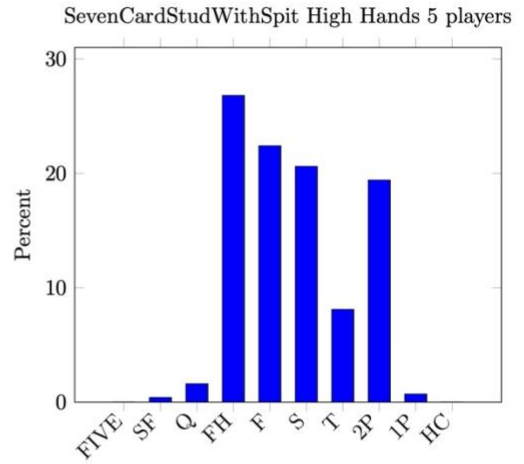


Median Low Hand: A235T

NOTE ON SOME POKER VARIATIONS

SevenCardStudWithSpit High Hands 5 players

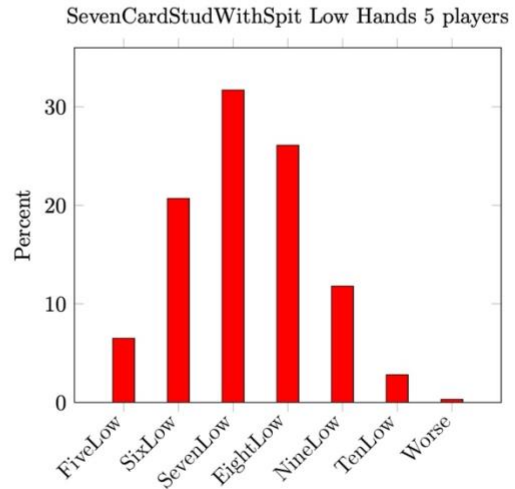
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.4 |
| Quads | 1.6 |
| Full House | 26.8 |
| Flush | 22.4 |
| Straight | 20.6 |
| Trips | 8.1 |
| Two Pair | 19.4 |
| One Pair | 0.7 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: T9532-Ten-High Flush

SevenCardStudWithSpit Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 6.5 |
| Six-Low | 20.7 |
| Seven-Low | 31.7 |
| Eight-Low | 26.1 |
| Nine-Low | 11.8 |
| Ten-Low | 2.8 |
| Worse | 0.3 |
| Total | 100.0 |



Median Low Hand: 7-low:A3567

NOTE ON SOME POKER VARIATIONS

BUNDLES RICKY VARIATION

Each player receives five private cards, and twelve table cards are dealt as a top row of three columns of three cards each, plus a bottom set of three cards. Make your best five card poker hand using two private cards, two cards from one of the three columns, and one card from the bottom set.

The wheel does not play in this variation, so the best low is 6432A. The game is also typically played with qualifiers of Trips for high and an Eight-Low or better for low. However the tables below include all rank hands, and one can simply truncate the values as needed. There is a total of 270 possible hand combinations.

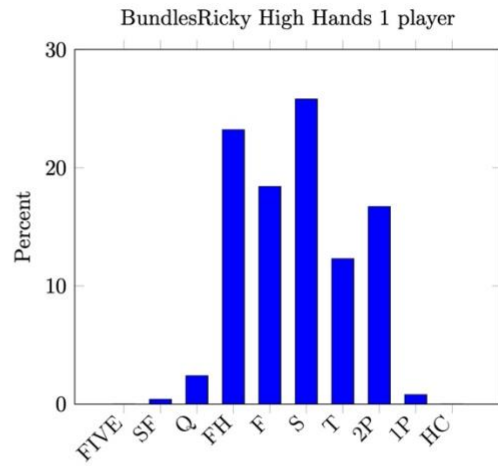
With five players in the hand a Full House or better occurs over 70% of the time, and a Six-Low over half the time. No low occurs about 5% of the time.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | KQJT9 Straight | 8532A |
| Five | 99944 Full House | 6543A |

NOTE ON SOME POKER VARIATIONS

BundlesRicky High Hands 1 player

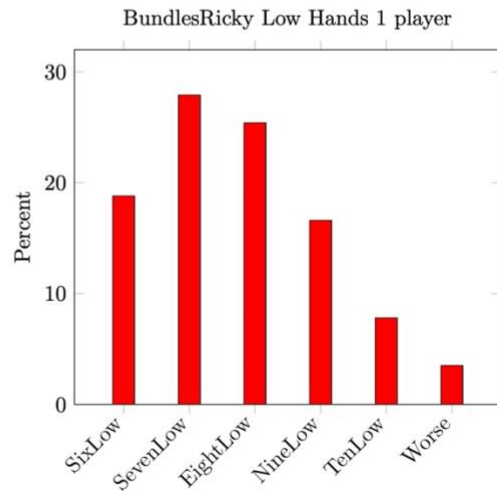
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.4 |
| Quads | 2.4 |
| Full House | 23.2 |
| Flush | 18.4 |
| Straight | 25.8 |
| Trips | 12.3 |
| Two Pair | 16.7 |
| One Pair | 0.8 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: KQJT9-King-High Straight

BundlesRicky Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Six-Low | 18.8 |
| Seven-Low | 27.9 |
| Eight-Low | 25.4 |
| Nine-Low | 16.6 |
| Ten-Low | 7.8 |
| Worse | 3.5 |
| Total | 100.0 |

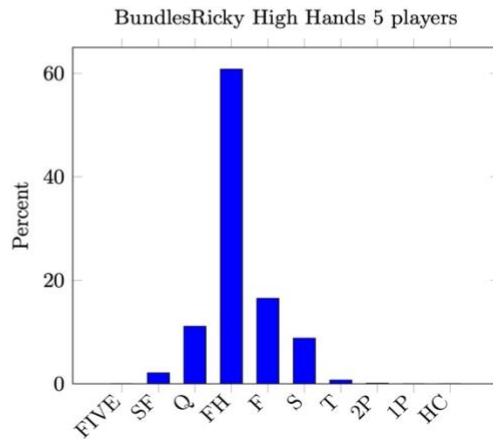


Median Low Hand: 8-low:A2358

NOTE ON SOME POKER VARIATIONS

BundlesRicky High Hands 5 players

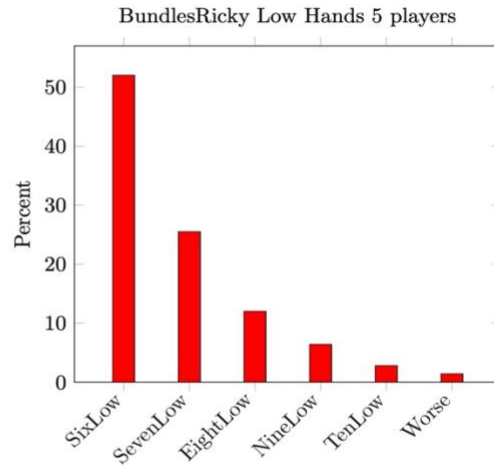
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.1 |
| Quads | 11.1 |
| Full House | 60.8 |
| Flush | 16.5 |
| Straight | 8.8 |
| Trips | 0.7 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 99944-Nines Full over Fours

BundlesRicky Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Six-Low | 52.0 |
| Seven-Low | 25.5 |
| Eight-Low | 12.0 |
| Nine-Low | 6.4 |
| Ten-Low | 2.8 |
| Worse | 1.4 |
| Total | 100.0 |



Median Low Hand: 6-low:A3456

NOTE ON SOME POKER VARIATIONS

TIC-TAC-TOE RICKY VARIATION

Each player receives five private cards, and ten table cards are dealt, nine as a 3x3 square, and one extra card to the side. Make your best five-card poker hand using two private cards, and three from the 3x3 square in any Tic-Tac-Toe direction (three rows, three columns, and two diagonals). However, the tenth card can be used in place of any one of the nine table cards. The best low is 6432A, and one needs an Eight-Low or better to qualify. There may also be a high qualifier like Trips.

There are 320 possible combinations with which to make the player's hand.

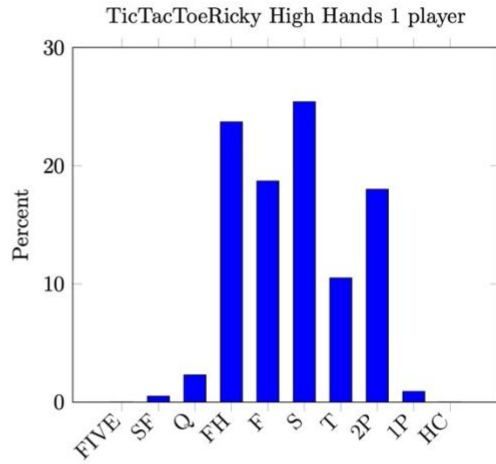
With five players in the hand, there is about a 75% chance someone has a Full-House or better, and about a 50% chance someone has a Six-Low.

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | KQJT9 Straight | 85432 |
| Five | 99966 Full House | 7432A |

NOTE ON SOME POKER VARIATIONS

TicTacToeRicky High Hands 1 player

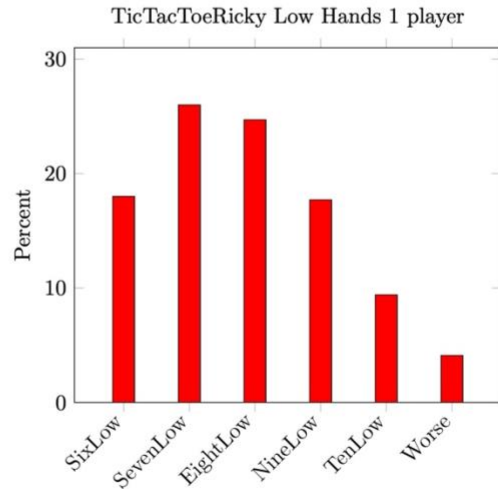
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.5 |
| Quads | 2.3 |
| Full House | 23.7 |
| Flush | 18.7 |
| Straight | 25.4 |
| Trips | 10.5 |
| Two Pair | 18.0 |
| One Pair | 0.9 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: KQJT9-King-High Straight

TicTacToeRicky Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Six-Low | 18.0 |
| Seven-Low | 26.0 |
| Eight-Low | 24.7 |
| Nine-Low | 17.7 |
| Ten-Low | 9.4 |
| Worse | 4.1 |
| Total | 100.0 |

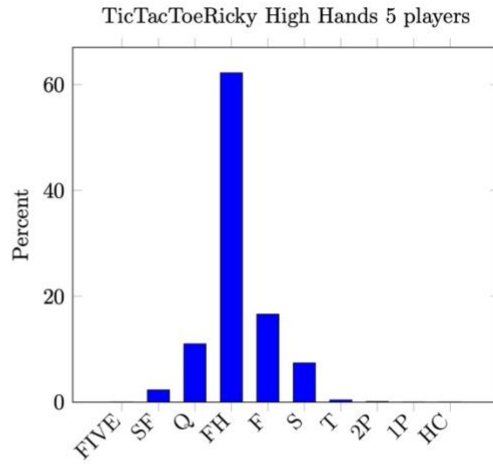


Median Low Hand: 8-low:23458

NOTE ON SOME POKER VARIATIONS

TicTacToeRicky High Hands 5 players

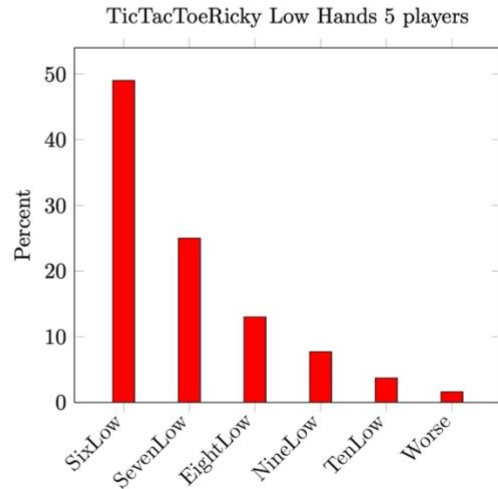
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 2.3 |
| Quads | 11.0 |
| Full House | 62.2 |
| Flush | 16.6 |
| Straight | 7.4 |
| Trips | 0.4 |
| Two Pair | 0.1 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 99966-Nines Full over Sixes

TicTacToeRicky Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Six-Low | 49.0 |
| Seven-Low | 25.0 |
| Eight-Low | 13.0 |
| Nine-Low | 7.7 |
| Ten-Low | 3.7 |
| Worse | 1.6 |
| Total | 100.0 |



Median Low Hand: 7-low:A2347

NOTE ON SOME POKER VARIATIONS

THE K

Each player receives five private cards. Nine table cards are dealt face up in the shape of a K: five cards form the vertical back, two extend as the upper branch, and two as the lower leg. Numbering the back {1–5}, the upper branch {6, 7}, and the lower leg {8, 9}, a player builds their best hand using two of their five private cards plus any one of these four sets of three table cards: {1,2,3}, {3,4,5}, {3,6,7}, or {3,8,9}. A player may use different private cards and table cards for their high and low hands. Low requires Eight-or-better, with the wheel (A-2-3-4-5) as the best low; straights and flushes are ignored for low purposes.

If no qualifying low hand is possible from any of the four sets — due to high cards or pairs — a tenth table card is dealt and added to all four sets, expanding each to four cards. If low is still not possible, an eleventh card is dealt. A twelfth card may be dealt as a final resort, but the process ends there regardless. In total, players work with a minimum of 14 cards (5 private + 9 table) and a maximum of 17. Observe that the absence of a possible low hand can affect high hands as well, since added cards can be used for both high and low.

A low hand is possible with the original board slightly less than half the time. The table below shows the probability of having 14 through 16 cards available.

| Extra Card Usage in “The K” | Probability |
|--------------------------------|-------------|
| Low with original board | 44% |
| Low after one extra card | 28% |
| Low after two extra cards | 15% |
| Low after three extra cards | 7% |
| No Low after three extra cards | 6% |

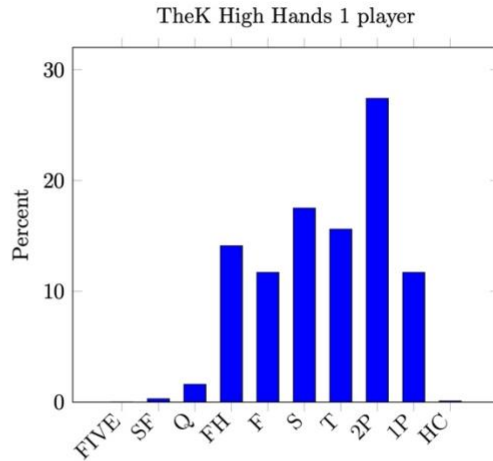
With five players, there is almost a 40% chance of a Full House and 13% of a perfect low.

| Number of Players | Median High | Median Low |
|-------------------|-------------|------------|
| One | JJJ52 Trips | 86532 |
| Five | AK943 Flush | 7542A |

NOTE ON SOME POKER VARIATIONS

TheK High Hands 1 player

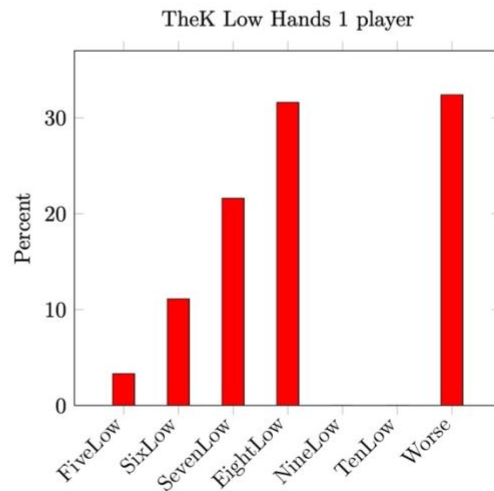
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 1.6 |
| Full House | 14.1 |
| Flush | 11.7 |
| Straight | 17.5 |
| Trips | 15.6 |
| Two Pair | 27.4 |
| One Pair | 11.7 |
| High Card | 0.1 |
| Total | 100.0 |



Median High Hand: JJJ52-Three Jacks

TheK Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 3.3 |
| Six-Low | 11.1 |
| Seven-Low | 21.6 |
| Eight-Low | 31.6 |
| Nine-Low | 0.0 |
| Ten-Low | 0.0 |
| Worse | 32.4 |
| Total | 100.0 |

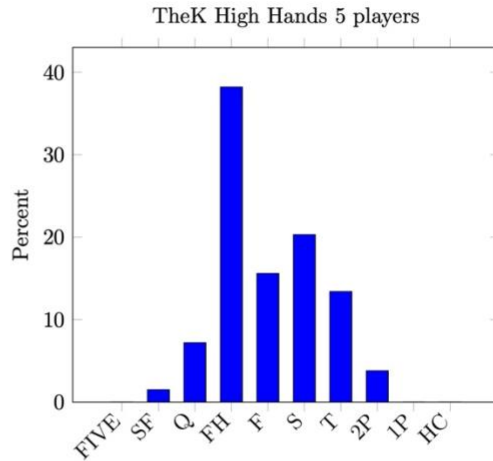


Median Low Hand: 8-low:23568

NOTE ON SOME POKER VARIATIONS

TheK High Hands 5 players

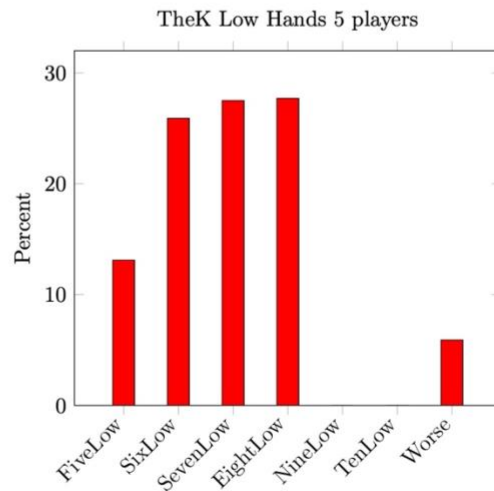
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.5 |
| Quads | 7.2 |
| Full House | 38.2 |
| Flush | 15.6 |
| Straight | 20.3 |
| Trips | 13.4 |
| Two Pair | 3.8 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: AK943-Ace-High Flush

TheK Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 13.1 |
| Six-Low | 25.9 |
| Seven-Low | 27.5 |
| Eight-Low | 27.7 |
| Nine-Low | 0.0 |
| Ten-Low | 0.0 |
| Worse | 5.9 |
| Total | 100.0 |



Median Low Hand: 7-low:A2457

NOTE ON SOME POKER VARIATIONS

RATS ASS

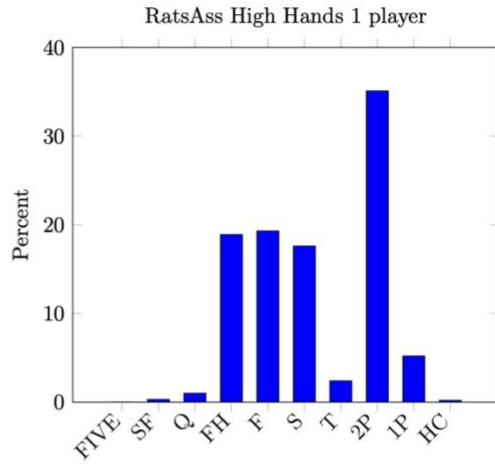
Each player receives five private cards, and five table cards are dealt face down. There is a round of betting, then the table cards are revealed (generally three on the first round), with a round of betting after each. Make your best high and low hand using your five private cards and the five table cards. Each player has 252 possible hand combinations. With five players, there is almost a 65% chance someone has a Full House or better, and better than a 15% chance someone has a perfect low (A2345).

| Number of Players | Median High | Median Low |
|-------------------|------------------|------------|
| One | 98765 Straight | 87542 |
| Five | 66688 Full House | 7432A |

NOTE ON SOME POKER VARIATIONS

RatsAss High Hands 1 player

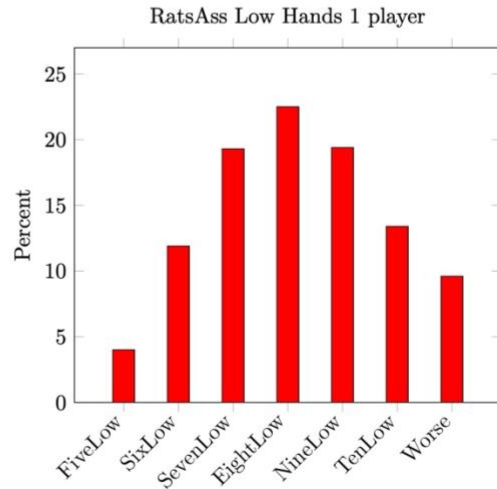
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 1.0 |
| Full House | 18.9 |
| Flush | 19.3 |
| Straight | 17.6 |
| Trips | 2.4 |
| Two Pair | 35.1 |
| One Pair | 5.2 |
| High Card | 0.2 |
| Total | 100.0 |



Median High Hand: 98765-Nine-High Straight

RatsAss Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 4.0 |
| Six-Low | 11.9 |
| Seven-Low | 19.3 |
| Eight-Low | 22.5 |
| Nine-Low | 19.4 |
| Ten-Low | 13.4 |
| Worse | 9.6 |
| Total | 100.0 |

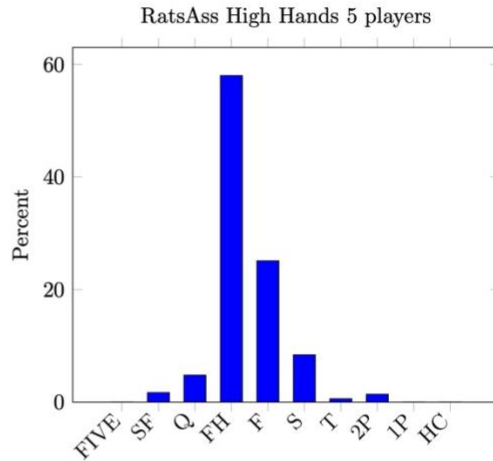


Median Low Hand: 8-low:24578

NOTE ON SOME POKER VARIATIONS

RatsAss High Hands 5 players

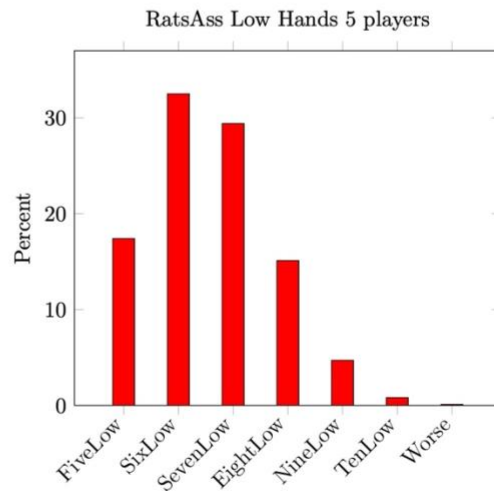
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 1.7 |
| Quads | 4.8 |
| Full House | 58.0 |
| Flush | 25.1 |
| Straight | 8.4 |
| Trips | 0.6 |
| Two Pair | 1.4 |
| One Pair | 0.0 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 66688-Sixes Full over Eights

RatsAss Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 17.4 |
| Six-Low | 32.5 |
| Seven-Low | 29.4 |
| Eight-Low | 15.1 |
| Nine-Low | 4.7 |
| Ten-Low | 0.8 |
| Worse | 0.1 |
| Total | 100.0 |



Median Low Hand: 7-low:A2347

NOTE ON SOME POKER VARIATIONS

FIVE CARD DRAW

It may seem a little odd to write about a game we never actually play, but there is a reason. To add the option of drawing cards to my simulation model (for example, to tackle the game 5-2-1), I had to work out the optimal discard strategy for each possible five-card hand. In other words, should the player draw anywhere from zero to three cards, for each of the 2,598,960 possible five-card poker hands. Once I had gone to the trouble of having the computer make the necessary 450,129,476,160 calculations, it seemed only fair to share the results, particularly the probabilities of various hands after the draw, which are not as easy to come by.

| Five Card | Pre Draw | Post Draw |
|----------------|--------------|--------------|
| Hand Rank | Distribution | Distribution |
| Straight Flush | 0.0% | 0.0% |
| Quads | 0.0% | 0.2% |
| Full House | 0.1% | 1.1% |
| Flush | 0.2% | 0.8% |
| Straight | 0.4% | 0.9% |
| Trips | 2.1% | 7.1% |
| Two Pair | 4.8% | 13.2% |
| One Pair | 42.3% | 50.4% |
| High Card | 50.1% | 26.2% |

While Full Houses show the most dramatic post-draw improvement, keep in mind that they occur only about 1% of the time overall. Being dealt a Four-Flush occurs a bit over 4% of the time, and filling it with a one-card draw occurs about 19% of the time.

| Drawing Three to Pair | |
|-----------------------|-------|
| Quads | 0.3% |
| Full House | 1.0% |
| Trips | 11.4% |
| Two Pair | 16.0% |
| One Pair | 71.3% |

| Drawing One to Two Pair | |
|-------------------------|-------|
| Full House | 8.5% |
| Two Pair | 91.5% |

| Drawing One to Four Flush | |
|---------------------------|-------|
| Straight Flush | 0.2% |
| Flush | 19.0% |
| Straight | 0.5% |
| One Pair | 25.5% |
| High Card | 54.9% |

NOTE ON SOME POKER VARIATIONS

FIVE TWO ONE

This game blends draw poker with Omaha-style hand selection. Ignoring the betting rounds, each player starts with five private cards, while two community cards are dealt face down on the table. Players may discard up to three cards and draw replacements. Once the draw is complete, the two table cards are revealed and shared by all. Each player then makes the best possible five-card hand from the seven available cards.

This game was trickier to model than most because the outcome depends in part on which cards a player chooses to discard, and that choice depends both on the hand initially dealt and on its likelihood of improving for high or low. To make the simulation feasible, the optimal discard strategy for each starting five-card hand was calculated in advance and built into the model. Even so, this remains an approximation.

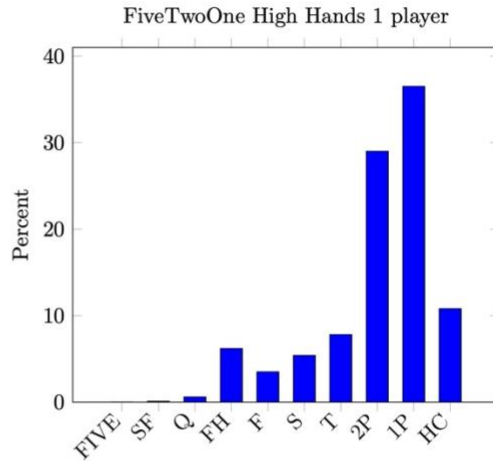
A more exact approach would evaluate every possible draw strategy that could leave the player with seven cards to choose from, determine the optimal strategy for each original five-card hand on that basis, and repeat the process for all 2,598,960 starting hands. The simplified approach required 450,129,476,160 computations; the fuller one would require 44,715,616,196,160—nearly a hundred times as many—and would take days to run. Nevertheless, I believe the results here are genuinely informative about Five-Two-One hand frequencies.

| Number of Players | Median High | Median Low |
|-------------------|----------------|--------------------|
| One | 99558 Two Pair | Worse than Ten Low |
| Five | 98765 Straight | 86432 Eight Low |

NOTE ON SOME POKER VARIATIONS

FiveTwoOne High Hands 1 player

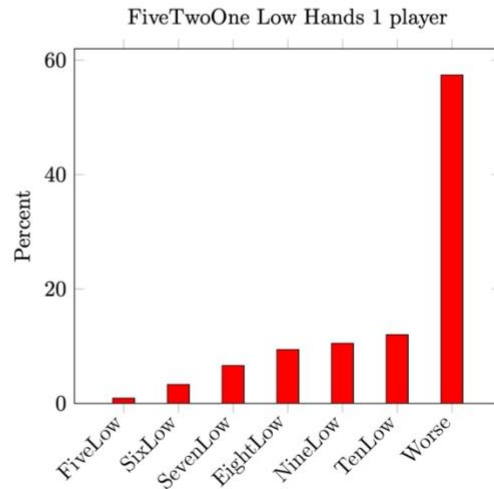
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.1 |
| Quads | 0.6 |
| Full House | 6.2 |
| Flush | 3.5 |
| Straight | 5.4 |
| Trips | 7.8 |
| Two Pair | 29.0 |
| One Pair | 36.5 |
| High Card | 10.8 |
| Total | 100.0 |



Median High Hand: 66558-Sixes and Fives

FiveTwoOne Low Hands 1 player

| Rank | Percent |
|-----------|---------|
| Five-Low | 0.9 |
| Six-Low | 3.3 |
| Seven-Low | 6.6 |
| Eight-Low | 9.4 |
| Nine-Low | 10.5 |
| Ten-Low | 12.0 |
| Worse | 57.4 |
| Total | 100.0 |

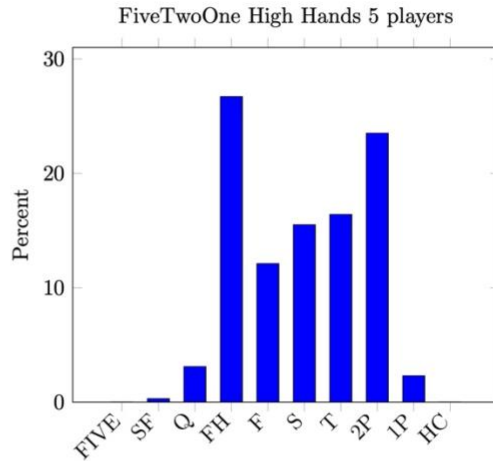


Median Low Hand: Worse than 10 low

NOTE ON SOME POKER VARIATIONS

FiveTwoOne High Hands 5 players

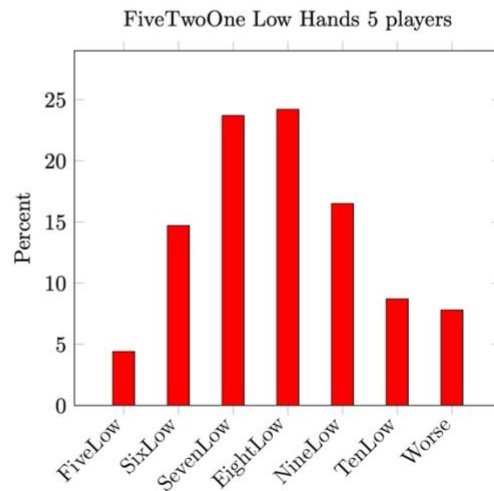
| Rank | Percent |
|----------------|---------|
| Five of a Kind | 0.0 |
| Straight Flush | 0.3 |
| Quads | 3.1 |
| Full House | 26.7 |
| Flush | 12.1 |
| Straight | 15.5 |
| Trips | 16.4 |
| Two Pair | 23.5 |
| One Pair | 2.3 |
| High Card | 0.0 |
| Total | 100.0 |



Median High Hand: 98765-Nine-High Straight

FiveTwoOne Low Hands 5 players

| Rank | Percent |
|-----------|---------|
| Five-Low | 4.4 |
| Six-Low | 14.7 |
| Seven-Low | 23.7 |
| Eight-Low | 24.2 |
| Nine-Low | 16.5 |
| Ten-Low | 8.7 |
| Worse | 7.8 |
| Total | 100.0 |



Median Low Hand: 8-low:23468