

## Introduction

Poker is a card game that exists in countless variants, some of which are introduce below. Typically, there are a number of dealing and betting rounds, at the end of which the player with the highest hand wins the game.

Just as there are many variations of the game itself, there are many ways to bet, and to play a set of games. While it's perfectly possible to play individual games for cash, it's also possible to play tournaments to determine a winner, whether or not gambling is involved.

The game involves a strong element of luck, but over the course of many games played, statistics, combinatorics, bluffing, and psychology become more and more important.

## Gameplay and ranking of hands

In casual play, the right to deal a hand typically rotates among the players and is marked by a token called a dealer button (or buck). Alternatively, a dedicated dealer handles the cards for each hand, but the button (typically a white plastic disk) is rotated clockwise among the players to indicate a nominal dealer to determine the order of betting. The cards are dealt clockwise around the poker table, one at a time.

One or more players are usually required to make forced bets, usually either an ante or a blind bet (sometimes both). The dealer shuffles the cards, the player on the chair to his or her right cuts, and the dealer deals the appropriate number of cards to the players one at a time, beginning with the player to his or her left. Cards may be dealt either face-up or face-down, depending on the variant of poker being played. After the initial deal, the first of what may be several betting rounds begins. Between rounds, the players' hands develop in some way, often by being dealt additional cards or replacing cards previously dealt. At the end of each round, all bets are gathered into the central pot.

At any time during a betting round, if one player bets, no opponents choose to call (match) the bet, and all opponents instead fold, the hand ends immediately, the bettor is awarded the pot, no cards are required to be shown, and the next hand begins. This is what makes bluffing possible. Bluffing is a primary feature of poker, one that distinguishes it from other vying games and from other games that make use of poker hand rankings.

At the end of the last betting round, if more than one player remains, there is a showdown, in which the players reveal their previously hidden cards and evaluate their hands. The player with the best hand according to the poker variant being played wins the pot. A poker hand





comprises five cards; in variants where a player has more than five cards available to them, only the best five-card combination counts.

The ranking of the individual cards, from high to low, is: Ace, King, Queen, Jack, 10, 9, 8, 7, 6, 5, 4, 3, 2. The raking of hands, from high to low, is as follows.

#### Five of a kind

Hand that contains five cards of one rank, such as five queens; only possible when using wild cards.

#### Royal flush

An ace-high straight flush, the highest hand in many poker games.

#### Straight flush

Hand that contains five cards of sequential rank, all of the same suit. Each straight flush is ranked by the rank of its highest-ranking card.

#### Four of a kind

Hand that contains four cards of one rank and one card of another rank (the kicker). Each four of a kind is ranked first by the rank of its quadruplet, and then by the rank of its kicker.

#### Full house

Hand that contains three cards of one rank and two cards of another rank. Each full house is ranked first by the rank of its triplet, and then by the rank of its pair.

#### Flush

Hand that contains five cards all of the same suit, but not all of sequential rank. Each flush is ranked first by the rank of its highest-ranking card, then by the rank of its second highest-ranking card, then by the rank of its fourth highest-ranking card, and finally by the rank of its lowest-ranking card.

#### Straight

Hand that contains five cards of sequential rank, not all of the same suit. Each straight is ranked by the rank of its highest-ranking card. Under high rules (the highest hand wins), an ace can rank either high (as in  $A \diamondsuit$  K log Q log J log 10 log, an ace-high straight) or low (as in 5 log 4 log 3 log 2 log A log a five-high straight), but cannot simultaneously rank both high and low (so Q log K log A log 2 log 3 log is an ace-high hand).

#### Three of a kind

Hand that contains three cards of one rank and two cards of two other ranks (the kickers). Each three of a kind is ranked first by the rank of its triplet, then by the rank of its highest-ranking kicker, and finally by the rank of its lowest-ranking kicker.

#### Two pair

Hand that contains two cards of one rank, two cards of another rank and one card of a third rank (the kicker). Each two pair is ranked first by the rank of its highest-ranking pair, then by the rank of its lowest-ranking pair, and finally by the rank of its kicker.



### One pair

Hand that contains two cards of one rank and three cards of three other ranks (the kickers). Each one pair is ranked first by the rank of its pair, then by the rank of its highest-ranking kicker, then by the rank of its second highest-ranking kicker, and finally by the rank of its lowest-ranking kicker.

### High card

None of the above, i.e. a hand that does not fall into any other category. Each high card hand is ranked first by the rank of its highest-ranking card, then by the rank of its second highest-ranking card, then by the rank of its third highest-ranking card, then by the rank of its fourth highest-ranking card, and finally by the rank of its lowest-ranking card.

## Texas hold 'em

Following a shuffle of the cards, play begins with each player being dealt two cards face down, with the player in the small blind receiving the first card and the player in the button seat receiving the last card dealt. (As in most poker games, the deck is a standard 52-card deck containing no jokers.) These cards are the players' hole or pocket cards. These are the only cards each player will receive individually, and they will (possibly) be revealed only at the showdown, making Texas hold 'em a closed poker game.

The hand begins with a "pre-flop" betting round, beginning with the player to the left of the big blind (or the player to the left of the dealer, if no blinds are used) and continuing clockwise. A round of betting continues until every player has folded, put in all of their chips, or matched the amount put in by all other active players. See betting for a detailed account. Note that the blinds are considered "live" in the pre-flop betting round, meaning that they are counted toward the amount that the blind player must contribute. If all players call around to the player in the big blind position, that player may either check or raise.

After the pre-flop betting round, assuming there remain at least two players taking part in the hand, the dealer deals a flop: three face-up community cards. The flop is followed by a second betting round. This and all subsequent betting rounds begin with the player to the dealer's left and continue clockwise.

After the flop betting round ends, a single community card (called the turn or fourth street) is dealt, followed by a third betting round. A final single community card (called the river or fifth street) is then dealt, followed by a fourth betting round and the showdown, if necessary. In the third and fourth betting rounds, the stakes double.

In all casinos, the dealer will burn a card before the flop, turn, and river. Because of this burn, players who are betting cannot see the back of the next community card to come. This is done for traditional reasons, to avoid any possibility of a player knowing in advance the next card to be dealt due to its being marked.

The showdown: If a player bets and all other players fold, then the remaining player is awarded the pot and is not required to show their hole cards. If two or more players remain after the final betting round, a showdown occurs. On the showdown, each player plays the best poker hand they can make from the seven cards comprising their two-hole cards and the five community cards. A player may use both of their own two hole cards, only one, or none at all, to form their final five-card hand. If the five community cards form the player's best hand,



then the player is said to be playing the board and can only hope to split the pot, because each other player can also use the same five cards to construct the same hand.

If the best hand is shared by more than one player, then the pot is split equally among them, with any extra chips going to the first players after the button in clockwise order. It is common for players to have closely valued, but not identically ranked hands. Nevertheless, one must be careful in determining the best hand; if the hand involves fewer than five cards, (such as two pair or three of a kind), then kickers are used to settle ties (see the second example below). The card's numerical rank is of sole importance; suit values are irrelevant in hold 'em.

Various betting structures exist for Texas hold 'em. Normally, it is played using small and big blind bets— forced bets by two players. Antes (forced contributions by all players) may be used in addition to blinds, particularly in later stages of tournament play. A dealer button is used to represent the player in the dealer position; the dealer button rotates clockwise after each hand, changing the position of the dealer and blinds. The small blind is posted by the player to the left of the dealer and is usually equal to half of the big blind. The big blind, posted by the player to the left of the small blind, is equal to the minimum bet. In tournament poker, the blind/ante structure periodically increases as the tournament progresses. After one round of betting is done, the next betting round will start by the person in the small blind.

When only two players remain, special ,head-to-head' or ,heads up' rules are enforced and the blinds are posted differently. In this case, the person with the dealer button posts the small blind, while his/her opponent places the big blind. The dealer acts first before the flop. After the flop, the dealer acts last and continues to do so for the remainder of the hand.

The three most common variations of hold 'em are limit hold 'em, no-limit hold 'em, and potlimit hold'em. In limit hold 'em, bets and raises during the first two rounds of betting (preflop and flop) must be equal to the big blind; this amount is called the small bet. In the next two rounds of betting (turn and river), bets and raises must be equal to twice the big blind; this amount is called the big bet. In no-limit hold 'em, players may bet or raise any amount over the minimum raise up to all of the chips the player has at the table (called an all-in bet). The minimum raise is equal to the size of the previous bet or raise. If someone wishes to re-raise, they must raise at least the amount of the previous raise. If a raise or re-raise is all-in and does not equal the size of the previous raise (or half the size in some casinos), the initial raiser cannot re-raise again (in case there are other players also still in the game). In pot-limit hold 'em, the maximum raise is the current size of the pot (including the amount needed to call).

## Omaha

Omaha hold 'em is similar to Texas hold 'em, but each player is dealt four cards and must make their best hand using exactly two of them, plus exactly three of the five community cards.

In North America, the term "Omaha" can refer to several poker games. The original game is also commonly known as "Omaha high". A high-low split version called "Omaha Hi-Lo", or sometimes "Omaha eight-or-better" or "Omaha/8", is also played. In Europe, "Omaha" still typically refers to the high version of the game, usually played pot-limit.

In Omaha/8, each player makes a separate five-card high hand and five-card ace-to-five low



hand (eight-high or lower to qualify), and the pot is split between the high and low (which may be the same player). Each player can play any two of their four hole cards to make their high hand, and any two of their four hole cards to make their low hand. If there is no qualifying low hand, the high hand wins (scoops) the whole pot.

## Seven-card stud

Seven-card stud, also known as Seven-Toed Pete or Down-The-River is one of the most popular poker variants in home games across the United States, and in casinos in the eastern part of the country. Two to eight players is common, though eight may require special rules for the last cards dealt if no players fold. With experienced players who fold often, even playing with nine players is possible.

Rules: The game begins with each player being dealt two cards face down and one card face up. The player with the lowest-ranking upcard pays the bring-in, and betting proceeds after that in normal clockwise order. The bring-in is considered an open, so the next player in turn may not check. If two players have equally ranked low cards, suit may be used to break the tie and assign the bring-in (see high card by suit). If there is no bring-in, then the first betting round begins with the player showing the highest-ranking upcard, who may check. In this case, suit is not used to break ties. If two players have the same high upcard, the one first in clockwise rotation from the dealer acts first.

After the first betting round, another upcard is dealt to each player (after a burn card, and starting at the dealer's left as will all subsequent rounds), followed by a second betting round beginning with the player whose upcards make the best poker hand. Since fewer than five cards are face up, this means no straights, flushes, or full houses will count for this purpose. On this and all subsequent betting rounds, the player whose face-up cards make the best poker hand will act first, and may check or bet up to the game's limit.

The second round is followed by a third upcard and betting round, a fourth upcard and betting round, and finally a downcard, a fifth betting round, and showdown if necessary. Sevencard stud can be summarized therefore as "two down, four up, one down". Upon showdown, each player makes the best five-card poker hand they can out of the seven cards they were dealt.

Seven cards to eight players plus four burn cards makes 60 cards, and there are only 52 in the deck. In most games this is not a problem because several players will have folded in early betting rounds. If the deck does become exhausted during play, previously-dealt burn cards can be used when only a few cards are needed to complete the deal. If even those are not sufficient, then on the final round instead of dealing a downcard to each player, a single community card is dealt to the center of the table, and is shared by everyone. Discarded cards from a folded hand are not reused.

Variants:

There are several variations of 7 Card Stud Poker in which each player is dealt a set number of cards. Not all of these variations can be found at poker rooms but they can be fun to play at home.

- "Down the River" is the basic variation of 7 Card Stud Poker.
- "Mississippi" removes the betting round between fourth and fifth streets, making only four betting rounds. This game also deals the fourth and fifth cards face up. This makes



the game more closely resemble Texas Hold 'em by having the same betting structure and the same number of down and up cards.

- Another is "roll your own", in which four rounds of two cards each are dealt down, and each player must "roll" one card to face up, followed by a round of betting. Except for the first round, the card rolled may or may not be from the round just dealt.
- "Queens and after": in this variant, all Queens are wild, and so is whatever card that is dealt face up that follows the Queen. All cards of that kind are now wild, both showing and in the hole. The fun part is that if another Queen is dealt face-up, the wild card will change to whatever follows this Queen. The former card is no longer wild.
- "Baseball": in this variant 3s and 9s are wild, and a 4 dealt face up gets an extra card.
- "Low Chicago": Low spade in the hole gets half the pot. Similarly, "High Chicago" means high spade instead of low. Just "Chicago" can mean either.
- "Acey Ducey": aces and twos are wild.
- One-eyed Jacks or Suicide King can be specified as wild.
- Razz is a lowball form of Seven Card Stud, with the objective being to get the lowest hand possible.
- In the variation called "Seven-Card Stud High-Low", the pot is split between the holder of the highest and lowest hand if the low hand is topped by at least an 8. Alternative names to this variation are Seven Card Stud/8 and Seven Card Stud Split.

### **Five-card draw**

Five-card draw (also known as a Cantrell draw) is a poker variant that is considered the simplest variant of poker.

Play begins with each player being dealt five cards, one at a time, all face down. The remaining deck is placed aside, often protected by placing a chip or other marker on it. Players pick up the cards and hold them in their hands, being careful to keep them concealed from the other players, then a round of betting occurs.

The first betting round begins with the player to the left of the big blind, and subsequent rounds begin with the player to the dealer's left. Instead of small and big blinds, antes may be used, and in this case, the first betting round begins with the player to the dealer's left, and the second round begins with the player who opened the first round.

If more than one player remains after the first round, the "draw" phase begins. Each player specifies how many of their cards they wish to replace and discards them. The deck is retrieved, and each player is dealt in turn from the deck the same number of cards they discarded so that each player again has five cards.

A second "after the draw" betting round occurs beginning with the player to the dealer's left or else beginning with the player who opened the first round (the latter is common when antes are used instead of blinds). This is followed by a showdown, if more than one player remains, in which the player with the best hand wins the pot.