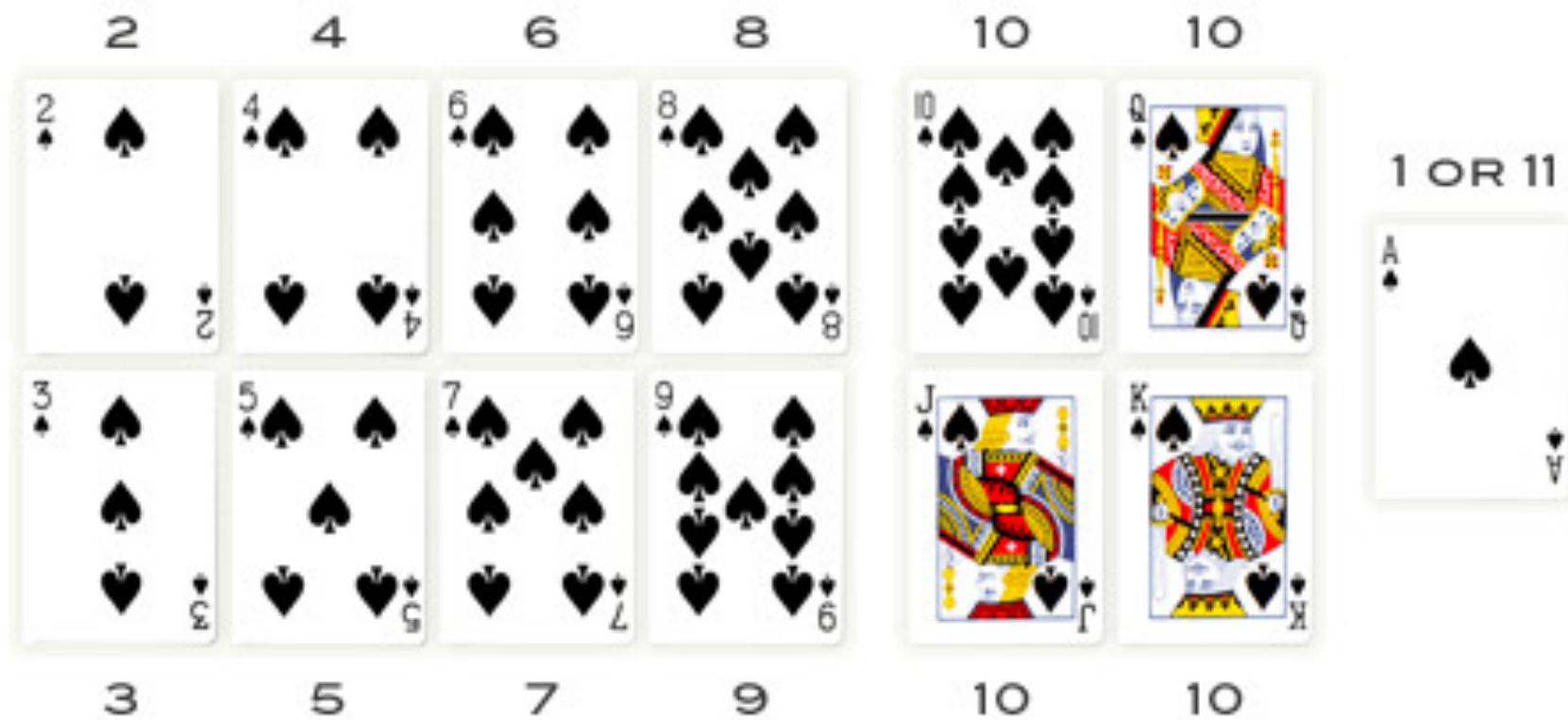




Blackjack – an introduction

The cards and their values



Card Values in Blackjack

52 cards per deck

How to count the ace

- ▶ For a player, the ace is always counted in the way it's best for him.



- ▶ For the dealer, the ace counts 11 as long as the total value is ≤ 21 . After it counts 1.



Special hands



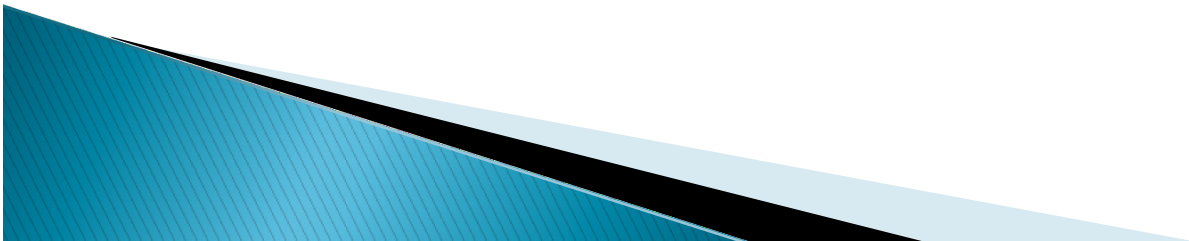
Blackjack



Triple Seven

The main ideas

- ▶ Player against the dealer
(no interaction between the players)
- ▶ Goal: closest to 21 without going over
- ▶ The dealer has to play with a fixed strategy;
the players have some options.



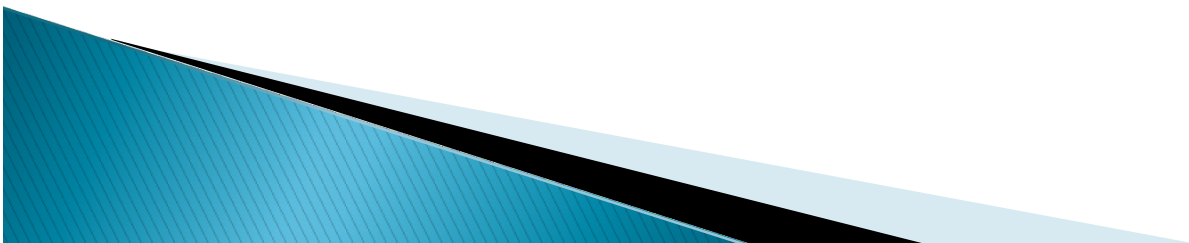
The game starts

1. Every player gets two cards.
2. The dealer gets two cards as well, but one card stays covered.
3. Every player can play different options according to his strategy.
4. In the end, the dealer plays and then every player gets his payoff.



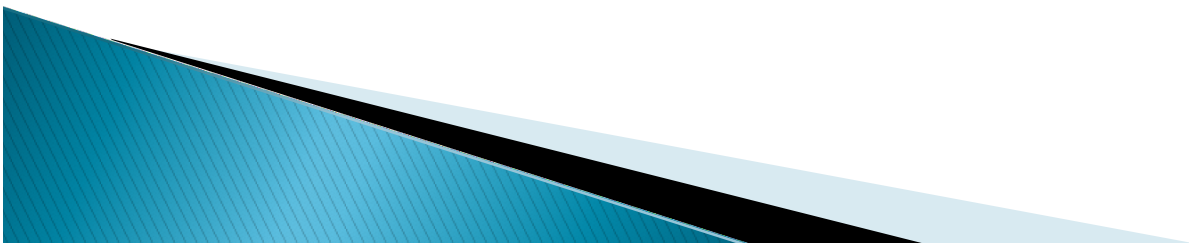
Winning constellations

- ▶ Triple seven (payoff 3:2)
- ▶ Blackjack without a blackjack of the dealer (payoff 1:1)
- ▶ Higher score than the dealer without exceeding 21 (payoff 1:1)
- ▶ The dealer exceeds 21 by drawing additional cards (payoff 1:1)



Losing constellations

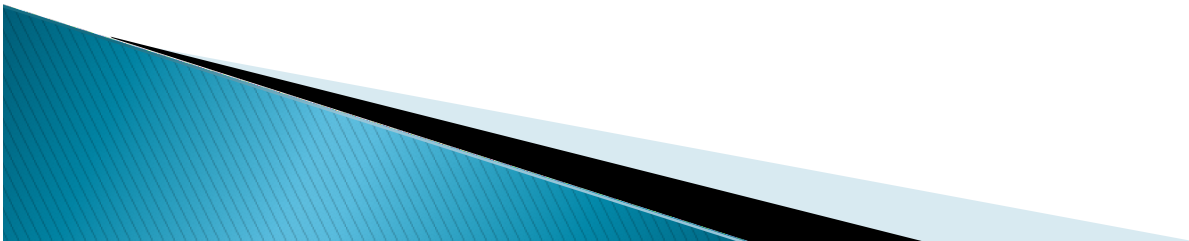
- ▶ Dealer's blackjack without player's blackjack
 - ▶ The player goes bust (over 21)
 - ▶ The dealer is closer to 21 (without exceeding) than the player
- In these cases, the player's bet is lost.



Draws

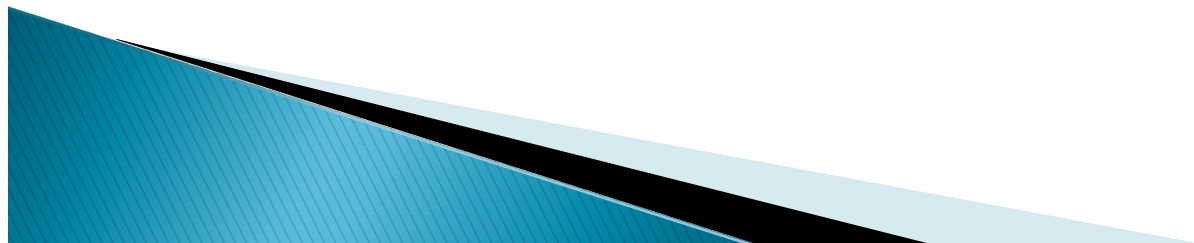
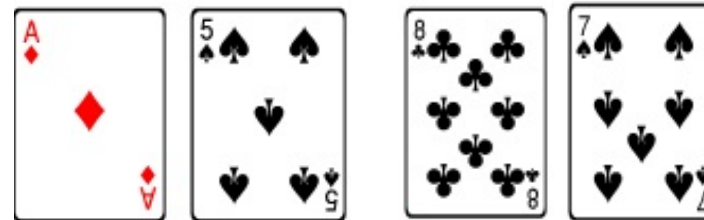
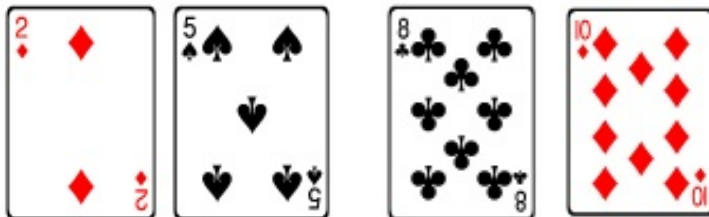
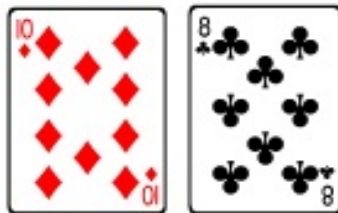
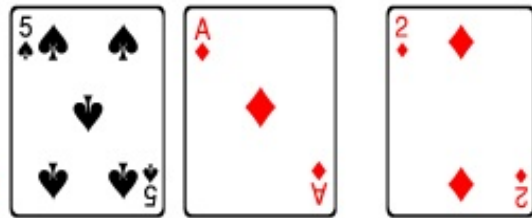
- ▶ Whenever the value of the dealer's hand equals the value of the player's hand, the player gets back his bet.

e. g. if both have blackjack



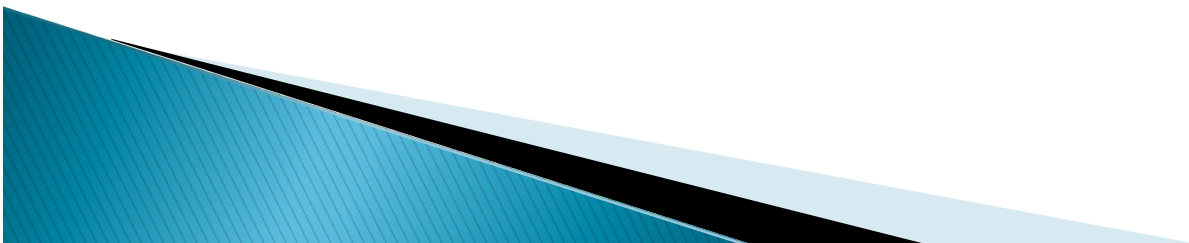
The dealer's strategy

- ▶ As long as the value of the dealer's cards is < 17 , he has to draw another card.

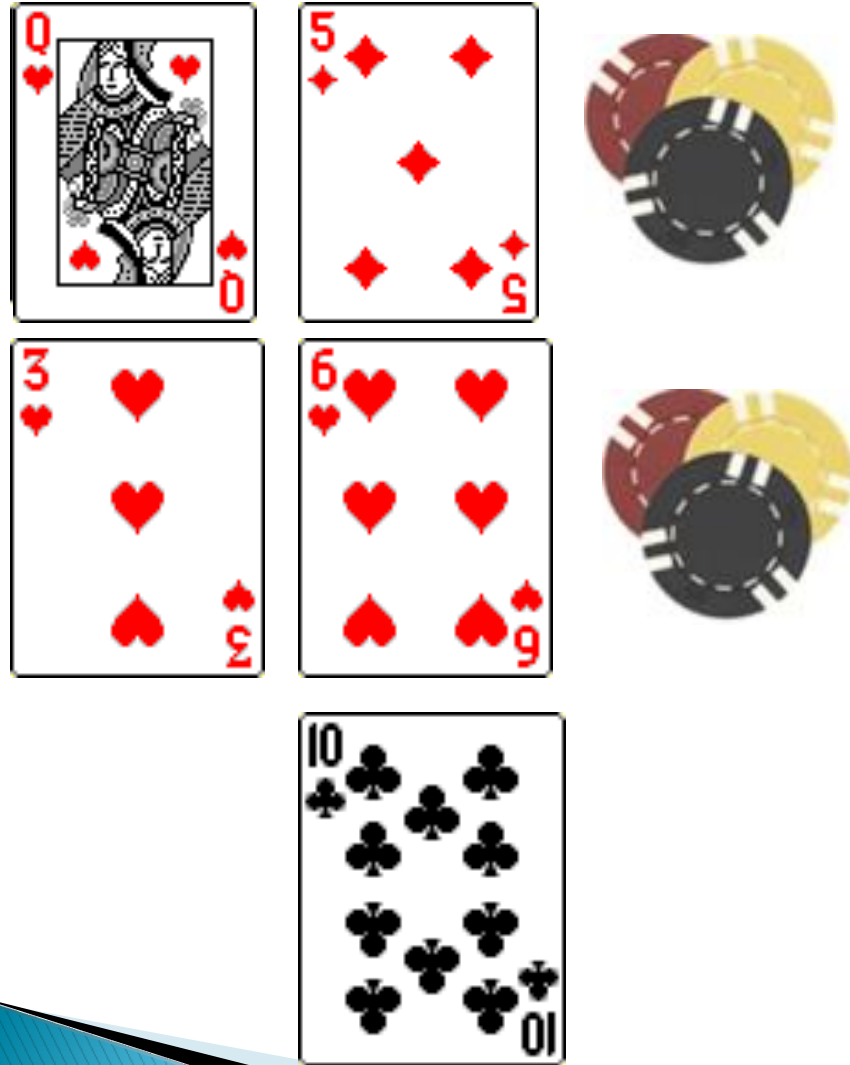


The player's options

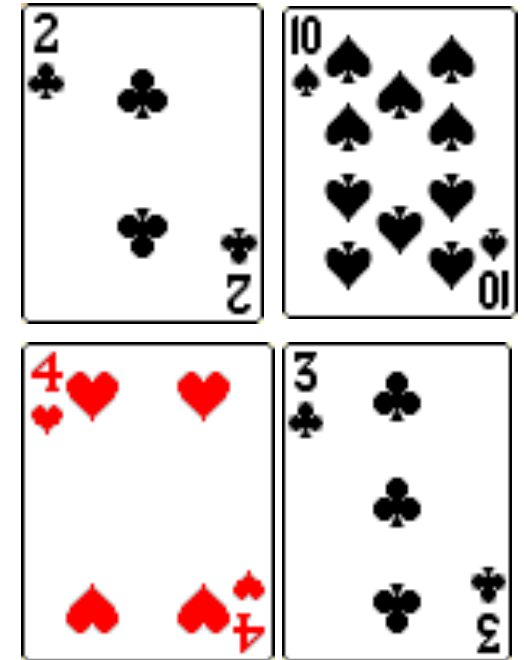
- ▶ **Hit:** Draw an additional card.
- ▶ **Split:** Only possible if the first two cards were a pair.
- ▶ **Double down:** Double the bet. The player gets exactly one more card.
- ▶ **Stand:** No change.



A short animation



Player



Dealer