# Gin rummy rules

## Amount of players

Gin-Rummy is always played with 2 players

## Equipment

A 52-card deck without Jokers.

## Set up

Choose who of the 2 players will be the dealer for this round.

The dealer deals every player 10 cards, one at a time for each player. Keep all the decks closed. Put the rest of the remaining cards together at one pile, this is the stockpile. Now the dealer takes one card from the stockpile and place it face up next to the stockpile. This card will be the beginning of the discard pile

## Goal

End up each round with as many sets as possible.

There are two different ways to gain a set:

* Three or four consecutive cards in the **same suit** (4-5-6)
* Three or four cards with the same rank (4-4-4)

Note: aces count as 1, so (queen-king-ace) is not a valid set but (ace-2-3) is.

## Gameplay

Start by sorting your own cards in possible sets.

The non-dealer will start. Decide whether the card of the discard-pile is helpful for you to create a set or not. If it is, take the card and put it into your deck.

If you don’t think this card could work in your favor, then the other player can choose to take the card or not. When this player also declines the card, you need to take the card from the stockpile. Once you took a card, you need to also discard a card of your own that won’t be of any help. If you took your new card from the discard pile, you need to keep this card at least one round into your deck, so you can’t discard this one immediately. However, if you took your card from the stockpile you are allowed discard this one.

The card you discard will be the new top card of the discard file.

Now the dealer can choose whether to take the card you just discarded or to pass it.

Continue this until the end of the game

## End of the game

If a player takes the third to last card from the stockpile, and nobody knocked, the hand is cancelled. Nobody ends up with points and a new round must be started

## Knocking

To close a game and end up with possible points, you need to knock!

If your deck consists of all sets and no unmatched cards (deadwood), then you have a ‘gin’.

Once it’s your turn again, draw a card and place it face town to the discard-pile. You now get 25 points for your ‘gin’ and in addition all the deadwood points of your opponent.

## Knock to prevent opponents’ ‘gin’

If you think your opponent might reach gin quick, you can knock so that you deprive his 25 bonus points. When it’s your turn, draw a card and choose a card that is of no use face-down on the discard-pile. You can only do this if your deadwood cards have a total worth of 10 points or less. King, queens and jack are worth 3 points, aces worth 1 and all the numerical cards are worth their value.

Once you knocked, face all your cards up to your opponent and put sets together.

Now your opponent can get rid of some of his deadwood cards by putting them into a set that you already have. For example, if one set of mine consists of 5-5-5 and my opponent has a 5 as a deadwood card, he can ‘add’ his card to my set.

Now, to determine the points, we count the values of the remaining deadwood cards from both players and subtracts those two. For example, I knocked, and my deadwood value is 4, and my opponents is 20, I get 16 points.

You don’t do this when somebody knocked and has a ‘gin’. Then this person gets the 25 points plus the deadwood values of his opponent.

## Undercut

However, if I knocked but my opponent has fewer deadwood points then me, it’s called an undercut. The difference in deadwood points is now rewarded to him plus an extra 25 points for doing an undercut.

## Winner

Play until one player reaches a 100 points, once this happened, this player also gets a 100 bonuspoints for reaching it. Then each player gets 25 points for winning a round.

If it’s the case that a player didn’t win any round, then this is called a shutout. this player gets an additional 100 points.

The player who ends up with the most amount of points after this, wins.

GOOD FOR OUR AI:

* Remember all the cards that have been put to the discard pile. If 2 aces have been put there, you know it is no use to try to make a set out of aces.
* Remember all the cards that our opponent has been picking up to try to get a sense about what kind of sets he/she has.