

This thesis is concerned with finding the Nash's equilibrium in specific situations of card game poker texas holdem. It lays solid theoretical foundations illustrated on simple problems for understanding the notion of Nash's equilibrium. Then we try to prove the existence of Nash's equilibrium in the situations of two or more players in the game. It turns out that the two-player game can be represented by two-person zero-sum game and the game with more players by uncooperative game of N players. We describe a method for finding the Nash's equilibrium for two-person zero-sum game based on a method of solving problems of linear programming and we find the equilibrium for particular situations. Considering the extent of the problem, computing device is used when calculating some problems.