

# Winning Craps

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The object of craps, like any casino game, solely revolves around the potential at earning a profit. Unbeknownst to many casino-goers, the odds are significantly skewed in the favor of the casino; an attempt to increase the total throughput. It would be logical to attempt to create a stratagem in order to maximize the chance at a profit. This project tests examples of those stratagems, using a computer program. C++ was used due to its simplicity, and un-infringed CPU capacity. Four betting strategies were used, among those: A limited across bet, which is a home-made betting strategy that involves placing and retracting bets after money is made; An unlimited across bet, which involves leaving place bets up until severing out, and a five dollar pass bet; The Iron Cross which involves a 5, 6, and 8, place bets, as well as a five dollar field bet; and a simple betting strategy which is merely a five dollar pass line bet. The program simulated these betting strategies for one year, assuming 300 rolls per night, for five days a week. The data of the betting strategy resulted in an average money gained at approximately \$ -12,000 over twenty trials. This of course is an unreasonable outcome; it is doubtful that you will maintain any of the betting strategies, much less the conviction to continue this daily gambling. Casinos also have a habit of removing people who appear to be abusing an evident pattern; this would result in the cease of the quintessential nature of the persistence of the pattern. These results, unfortunately prove conclusively that the betting strategy, on a large scale, loses the established impossibility of the casino.

**Awards Won:**