

65. Cribbage

When Jeff Martin was a coordinator of mathematics for the Etobicoke school board, he taught middle school students how to play cribbage, a nice card game for two. Those not familiar with the game can find the rules on the internet, for example at www.bicyclecards.com/how-to-play/cribbage/.

Since I do not have the space to go into detail about this game, I hope that you will check it out and teach it to your children and grandchildren. Unlike many card games for two, it does not depend solely on luck; the judgment and strategy of the players can influence their success. Basically, one gets points for playing or possessing pairs, runs and combinations of cards adding to 15, so it involves some mental arithmetic and looking at various ways in which cards can be combined to get the most points (or prevent your opponent from scoring).

An example will give you a sense of the dynamic. Suppose a player is dealt six cards, consisting of a 2, a 3, two 6's, and two 8's. According to the rules, the player retains four of these cards and throws the other two into a "crib" along with two cards from the opponent's hand. The score that the player gets for the hand is determined by the four retained cards along with the top card ("turnup") of the undealt stock which will be turned over once the crib is determined.

The player sees four points in the hand for the 3-6-6, two points because the three cards add to 15 and two points for the pair of sixes. This will not be increased whatever fourth card is retained. If the turnup is 3, 6 or 9, then additional points are available. For example, if a 6 is turned up, then the player will count 6 points for the three ways of getting 15 with two of the sixes and the three, and an additional 6 points for three ways of getting a pair of sixes. The player might not want to throw the two eights into the crib if the opponent is the dealer, because the dealer gets to count the crib as well as his own hand. But it might be worth doing this if the crib is yours. If the player keeps 2, 3, 6, 6, then the turnup of an ace, for example, will give additional points. An extra 2 for $A + 2 + 6 + 6 = 15$ and 3 points for the $A - 2 - 3$ run.

Alternatively, the player may wish to retain 6 - 6 - 8 - 8 in the hand and throw out the 2 - 3. (This may not be a good idea if the opponent gets the crib, because the opponent might throw in two tens (a picture is considered as a ten).) If the turnup is something like a queen, then this hand will garner only 4 points for the two pairs. However, if the turnup is a 7, then the player cleans up. There are 12 points for the four ways of making a 6 - 7 - 8 run, 4 points for the two pairs and 4 points for the two ways of getting $7 + 8 = 15$. The total take is 20 points.

So you see that there is a lot of evaluating possible outcomes, estimating probability and deciding how much risk is worth taking.