## Lecture January 28 Example Hands

Welcome to MATH299O: Probability and Bridge! This week's lesson was mainly an introduction to what it means to play bridge. This document will go over the two examples hands that were also gone through in class. Please contact me if any of the explanations do not make sense or if you have further questions. The screenshots below are what we call "double dummy", or where we can see all four hands. This makes it easier to analyze the hands rather than just having declarer and dummy. South is declarer, and the perspective that you should be thinking from when reading this analysis.

Hand 1


For the first hand, the final contract is 6NT (or 6 Notrump). This means that South is required to take 12 tricks in order to make the contract. South is declarer because they were the ones to bid notrump first. Since South is declarer, West is the leader as they are to declarer's left. Finally, North is dummy who will put their hand down for everyone to see. It is recommended for West to lead either spades, hearts, or diamonds since those are their longest suits.

Once West leads, North's hand as the dummy appears to South, East, and West. As emphasized in class, the first thing that declarer should do is count their tricks. Remember that we must always follow suit when possible. Looking at the spades, declarer has the $₫ \mathrm{AKQ}$ and
dummy has the $\uparrow 432$. This will lead to 3 spade tricks since we can play the $\uparrow A$ and dummy’s $\uparrow 2$, $\Delta K$ and dummy's $\uparrow 3, \Delta Q$ and dummy's $\$ 2$. Next we can look at the hearts. We can play dummy's $\vee A$ and our $\vee 2$, dummy's $\vee K$ and our $\vee 3$, then dummy's $\vee 4$ and our $\vee Q$ for 3 tricks there as well. Now we can look at the diamonds. We can play the $\uparrow A$ with dummy's $\uparrow 4$, the $\downarrow 2$ with dummy's $\vDash Q$, and the $\$ 3$ with dummy’s $\$ K$ for three tricks. So far we have 3 spades, 3 hearts, and 3 diamonds for 12 total tricks.

The final suit that we have to deal with is clubs. We have the 2 KQJ10 opposite 5432 . What is important to notice is that as soon as the is gone, we have 3 clubs tricks. 3 clubs, 3 diamonds, 3 hearts, and 3 spades is 12 total tricks and what we need to make our contract!

Note the order in which we play our tricks matters. We cannot play the spades, hearts, or diamonds before playing the clubs (since we need to get rid of the Ace). If we play all of our spades hearts, or diamonds first, West will be able to win the A of clubs, and a high card in the suit which we wasted our AKQ in already. Therefore as soon as we win the opening lead, we need to play on clubs immediately to set them up.

## Lessons from Hand 1

1. Counting tricks $(\mathrm{AKQ}=3, \mathrm{KQJ} 10=3)$
2. Importance of order of trick-taking.
a. Set up side suits first, keep your AKQ for later.
b. Can risk going down in contract unnecessarily

Hand 2


For this second hand, we will try to apply the same concepts, but this time in a suit contract. 7a is the contract which means that we must take all 13 tricks with spades as the trump suit. The main difference between a suit contract and a notrump contract is that now we have trumps. Recall that trumps are useful when you run out of a suit. For this contract, spades are trump. This means if we run out of hearts, clubs, or diamonds, we can simply play a spade and win the trick.

The main concept from the first hand is to try to count our tricks. AKKUJ109 of spades is 6 tricks, $\uparrow$ AK is 2 tricks, $\downarrow$ AK is 2 tricks, $\uparrow$ AK is 2 more tricks. $6+2+2+2=12$ total trick. We need 13 , so alarm bells should be ringing. We have to search for a 13 th trick from somewhere.

One of the main concepts of playing a suit (trump) contract is that we want to get rid of the opponents trumps so they cannot trump our good tricks. What happened at every table during lecture was that a club was trumped by the defense since West has only one club. This is the danger of not "drawing" opponents trump (by playing the $\uparrow A K Q$ since they must follow suit and after three tricks, everyone will be out of spades but South.

On this hand, we cannot actually draw trump as the first thing that we do, since that is the source of our 13th trick. In suit contracts, it is essential to look for dummy's short suits to see if it is possible to trump something from declarer's hand. Trumping from the long hand doesn't gain anything since we already counted that as part of the 12 tricks. But if we can trump with the $\uparrow 8$, that is an extra trick.

The way to make this contract is to:

1. Win whatever the leader plays,
2. Then immediately play the 『AK (using up both of dummy's hearts),
3. Trumping declarer’s $\vee 2$ with one of dummy's spades.
4. Play dummy's last spade to declarer's $₫ A K Q$ drawing all of the defenders trumps
5. Take all the other Aces and Kings

## Lesson from Hand 2

1. Counting Tricks
2. Trumping in dummy for extra tricks
3. Drawing trump before playing other Aces and Kings
