

## Bluffing Game

We will play the Bluffing Game next class. As preparation, please think about the game, answer the questions on the opposite side, **and turn in this sheet to the TA at the beginning of next lecture.**

### Description of Bluffing Game

The game is a very simple sort of poker. Be prepared to play either role (A or B)

- Both players put \$100 (hypothetical money) into “the pot” before play begins
- Player A receives a card. 1/3 of time it’s “Good Card”, 2/3 of time it’s “Bad Card”. (Player B does not get a card.)
- After getting the card, Player A can either bet \$100 more (“Raise”) or Not
  
- If Not Raise, game ends and Player A wins the pot (for net winning +100) if Good Card and loses pot (for net –100) if Bad Card. This is a zero-sum game, so B loses whatever A wins and vice versa.
  
- If Raise, Player B either gives up (“Fold”) or puts in an extra \$100 also (“Call”)
  - If Fold, Player A wins the pot automatically (payoff +100)
  - If Call, Player A wins the pot if Good Card (payoff +200) and loses the pot if Bad Card (payoff -200)

## How would you play?

Suppose that, before the game is played, your opponent is given the chance to tell you “how she thinks the game should be played”. (Suppose for our purposes that she tells the truth.)

1. “The way to play is to Raise given a Good Card and Not Raise given a Bad Card. This maximizes one’s winnings and minimizes one’s losses.”

How would you play, given that this is how she thinks one should play? (Both if you are Player A and if you are Player B.) Why?

2. “The way to play is always Raise. That gives you the opportunity to win big. If you have a Good Card, then you can win +200 if opponent calls and if you have a Bad Card you can still win if your opponent Folds, getting +100 instead of -100.”

How would you play, given that this is how she thinks one should play? (Both if you are Player A and if you are Player B.) Why?

Your Name: \_\_\_\_\_