

Everybody will again need to turn in their own copy of this activity

Your name: \_\_\_\_\_

Partner's name: \_\_\_\_\_

## In-class activity

## Game theory

Just like last time, pair up with a partner. One of you will be "Ms. Row," the other will be "Mr. Column." Decide who is going to be who and then answer the following two questions.

(1.) Which one of you is going to be Ms. Row? | (2.) Which one of you is going to be Mr. Column?

(3.) You're going to play the game given below, but **do the following in order to make this as close to a one-shot, simultaneous-move game as possible**. We're going to follow the same or similar procedures in order to play games in class, so get the hang of these procedures now.

PAYOFF MATRIX		MR. COLUMN	
		SMALL CLUB	BIG PARTY
MS. ROW	SMALL CLUB	2, 2	2, 3
	BIG PARTY	1, 1	1, -9999

(a.) **Without revealing your strategy to your partner**, decide which of your two strategies you're going to pick and then surreptitiously/secretly circle your choice:

SMALL CLUB or BIG PARTY

(b.) Once **both** you and your partner have picked your strategies, reveal them to each other. What strategy did your partner pick?

SMALL CLUB or BIG PARTY

(c.) Given the strategies picked by you and your partner, what's your payoff?

3   2   1   or   -9999

After answering the questions given above, **wait for instructions before moving on**.

(4.) We've learned about iterated-dominance equilibriums, but you might not have thought about that when you played the game, so please **go back to the other side of this paper work with your partner to find the "iterated dominance" equilibrium** for the game you just played. Be prepared to explain how you used our "iterated deletion of dominated strategies" method.

(5.a.) When asked to do so, use our underlining method to find the "Nash" equilibrium(s) for the game to the right.

(b.) What's the Nash equilibrium?

*The game's Nash equilibrium is that  
Ms. Row goes to the \_\_\_\_\_ &  
Mr. Column goes to the \_\_\_\_\_*

(c.) Why is that a Nash equilibrium?

*That is a Nash equilibrium because...*

**PAYOFF  
MATRIX**

**MS. ROW**

**SMALL CLUB**

**BIG PARTY**

**MR. COLUMN**

**SMALL CLUB**

**BIG PARTY**

2, 2	2, 3
1, 1	1, -9999

(6.) When asked to do so, play the game to the right as a one-shot, simultaneous-move game.

(a.) Without revealing your strategy to your partner, decide which of your two strategies you're going to pick and then surreptitiously / secretly circle your choice:

SMALL CLUB or BIG PARTY

(b.) Once **both** you and your partner have picked your strategies, reveal them to each other. What strategy did your partner pick?

SMALL CLUB or BIG PARTY

(c.) Given your strategies, what's your payoff?

2 1 or 0

**PAYOFF  
MATRIX**

**MS. ROW**

**SMALL CLUB**

**BIG PARTY**

**MR. COLUMN**

**SMALL CLUB**

**BIG PARTY**

2, 2	0, 0
0, 0	1, 1