

PROBLEM SET 6

due **Thu., March 27th** in class

(In class or my mailbox beforehand)

DECISIONS, GAMES & RATIONAL CHOICE

Exercise 1 (15 pts.) List the pure strategy Nash equilibria in the following zero-sum game. You don't need to show your work.

		Column			
		<i>C1</i>	<i>C2</i>	<i>C3</i>	<i>C4</i>
Row	<i>R1</i>	-4 4	-5 5	-4 4	-5 5
	<i>R2</i>	-4 4	-6 6	-4 4	-6 6
	<i>R3</i>	-3 3	-7 7	-2 2	-7 7
	<i>R4</i>	-2 2	-7 7	-3 3	-9 9

Exercise 2 (15 pts.) Find expected utilities of *both* Row and Column in this mixed strategy profile for the following game. Show your work.

$$\langle (\frac{1}{3})Left; (\frac{2}{3})Right, (\frac{1}{2})Up; (\frac{1}{2})Down \rangle$$

		Column	
		<i>Up</i>	<i>Down</i>
Row	<i>Left</i>	1 3	2 2
	<i>Right</i>	0 2	3 1

Exercise 3 (20 pts.) Find the mixed strategy Nash equilibrium for the following game. Show your work.

		Column	
		$C1$	$C2$
Row	$R1$	5 2	5 8
	$R2$	1 8	9 2