

Written answers are acceptable so long as they are legible. Remember, you can work with others but you must write the answers on your own. IF YOU WORK WITH OTHERS YOU MUST NOTE WITH WHOM YOU WORKED IN YOUR ANSWER.

Problem 1

	L	R		L	R
T	1, 1	0, 0	T	0, 0	0, 0
B	0, 0	0, 0	B	0, 0	2, 2

Suppose that nature chooses one of these two games with probability $1/2$. Suppose neither player learns which game is being played. What are the pure strategy Bayes Nash equilibria of the game?

Problem 2

Look again at the game from the last problem. Now suppose that the row player is informed about the choice of game, but the column player is not. What are the pure strategy Bayes nash equilibria of this game?

Problem 3

Suppose a first price, sealed bid auction but where a little more information is known. Suppose that Carlos' value for the object is \$2 and this is known by all players. Suppose that Shannon's value is drawn from a uniform distribution over $[0,1]$. Find a Nash equilibrium of this game where Shannon bids her value honestly. Find another Nash equilibrium of the game (bonus points for odd-ball equilibria).