

QUIZ 4, INTRO TO GAME THEORY

Part 1. Write up the normal (strategic) form (i.e. a bi-matrix of payoffs) for Rock, Paper, Scissors given that a player gets one util if she wins, negative one if she loses, and zero otherwise. Is this game static (i.e. one-shot) or dynamic? To which canonical 2x2 game is Rock, Paper, Scissors most similar?

	rock	paper	scissors
Rock	0,0	-1,1	1,-1
Paper	1,-1	0,0	-1,1
Scissors	-1,1	1,-1	0,0

This is a static game. And the game belongs to the class of zero sum. It is very similar to matching pennies

Part 2. Find the Nash Equilibrium of the Game

There is no Nash Equilibrium in pure strategies.

Part 3. Ultimatum Game: Suppose that you win 5,000 dollars. Nevertheless you have to make a gift to your friend. If your friend accepts your gift, you end up with 5,000-gift. If he rejects the gift, then you end up with 0. Find the Nash equilibrium of the game.

Nash equilibrium occurs when someone offers one penny and your friend accepts.

Part 4. Mention 3 things that you like from discussion. and 3 things you dislike. (This part is individual)