

8 Oct 2014

Math 181

Strictly Dominated Strategies:

How can we simplify the following game to find Nash Equilibria? (From handout on Oct 6)

4,-1	3,0	-3,1	-1,4	-2,0
-1,1	2,2	2,3	-1,0	2,5
2,1	-1,-1	0,4	4,-1	0,2
1,6	-3,0	-1,4	1,1	-1,4
0,0	1,4	-3,1	-2,3	-1,-1

Infinitely Many Nash Equilibria:

What are the Nash Equilibria of the following game?

4,0	2,1
-2,-1	2,0

Backward Induction:

Suppose you have five more years that you need to work, but you are currently unemployed. Each year, you have a 50/50 chance of being offered either a \$50,000 or a \$100,000 job. You can choose to accept the job, or reject the job and wait for a better offer next year. What is your best strategy to have the most money for retirement?

Homework: Read 15.5, pages 557–560. (The reading will help with the writing assignment.)

Go to www.tinyurl.com/gt101mahoney. Watch #24 and 25 (Centipede game and backward induction).

Due Friday: Suppose a friend has been sick and unable to attend class. When they return, they must be able to compute all Nash Equilibria for a 2-player game, where each player has two choices. You must write a guide on how to solve this type of problem in as much detail as possible. I will grade your guide by following it as precisely as possible on several example games.