

Introduction to Game Theory

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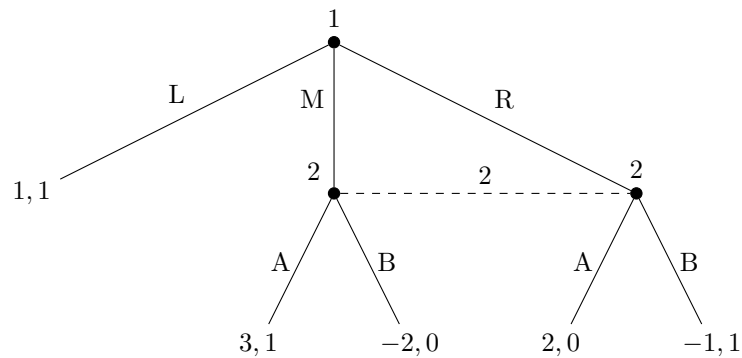
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Exercise Sheet 9

Due: Monday, June 25, 2018

Exercise 9.1 (Sequential equilibria, 4 points)

Consider the following imperfect information game:



Find the set of sequential equilibria of this game.

Exercise 9.2 (Voting procedures, 4 points)

For the following preference relations, determine the winners according to the **plurality vote**, **instant runoff voting**, **Borda count**, and **Coombs method**¹ (for simplicity, we assume that ties are broken in favor of the candidate with the lower index):

2 voters have the preference: $a_2 \succ a_4 \succ a_3 \succ a_5 \succ a_1$
3 voters have the preference: $a_1 \succ a_3 \succ a_4 \succ a_2 \succ a_5$
1 voter has the preference: $a_4 \succ a_2 \succ a_5 \succ a_1 \succ a_3$
2 voters have the preference: $a_5 \succ a_3 \succ a_4 \succ a_2 \succ a_1$

The exercise sheets may and should be worked on and handed in in groups of three students. Please indicate all names on your solution.

¹ https://en.wikipedia.org/wiki/Coombs%27_method