

CUR 412 - Game Theory and its Applications

Homework #3

- Due Date: May 10. Late homeworks will get a 50% penalty.
- Everyone must individually write up their own answers.
- Please write your names in English.

Note: the numbers of the exercises **may be different** if you are using an electronic copy of the textbook!
Please check that the **name** of the exercise is the same.

Exercises from Chapter 5 in textbook:

- 163.1 (Nash equilibria of extensive games)
- 163.2 (Voting by alternating veto)
- 164.2 (Subgames)
- 173.3 (Voting by alternating veto) : Answer the following:
 - Find the subgame perfect equilibria of the game in Exercise 163.2 (Voting by alternating veto).
 - Does the game have any Nash equilibrium that is not subgame perfect?
- 173.4 (Burning a bridge)

Exercises from Chapter 6 in textbook:

- 183.2 (Subgame perfect equilibria of the ultimatum game with indivisible units)
- 202.1 (Hungry lions) :
 - Draw the tree representation of the game for 3 lions.
 - Find a subgame perfect equilibrium for any number n of lions.