

Algorithmic game theory — Homeworks

Homework 1

Homework 1. *Compute all Nash equilibria in the Game of Chicken.*

[3]

	Turn	Go straight
Turn	(0,0)	(-1,1)
Go straight	(1,-1)	(-10,-10)

Table 1: A normal form of the Game of Chicken.

Homework 2. *Watch the scene from A Beautiful Mind where the John Nash character, played by Russell Crowe, explains what a Nash equilibrium is. Assume that the scenario described is modeled as a game with four players (the men), each with the same five actions (the women). Explain why the solution proposed in the movie is not a Nash equilibrium.* [1]