

Game Theory, Fall 2024

Problem Set 3

Due on Oct 14 in class

1. ST Exercise 6.5
2. ST Exercise 6.8
3. ST Exercise 6.9
4. There are $n \geq 2$ victims of sexual harassment by a perpetrator. Each of the victim simultaneously and independently decides whether to report the harassment or keep quiet. As long as at least one victim reports, the perpetrator is punished and each of the victim gets a payoff of 1. If no victim reports, the perpetrator is not punished and the victims get 0. Reporting has a cost $c \in (0, 1)$, while keeping quiet costs 0. Model this situation as a normal form game of the n victims.
 - (a) Model this situation as a normal form game of the n victims.
 - (b) Find all pure strategy Nash equilibria.
 - (c) Find a Nash equilibrium in mixed strategies.