

EconS 301- Intermediate Microeconomic Theory

Recitation - Friday October 28th, 2022.

1. Consider the Prisoner's Dilemma game and assume that, when a player confesses while her partner does not, the police do not offer any deal to the confessing player. As a consequence, payoff becomes $(-10, -1)$ or $(-1, -10)$. When both players confess their payoff is $(-5, -5)$ and when both players do not confess their payoff is $(-1, -1)$. Payoffs represent the time they spend in jail. Find the NE of the game, and compare your results against those in example 12.5 (Chapter 12). Interpret.
2. Consider again the Anticoordination game in Matrix 12.12. While we found two psNEs in that game, we can still find one msNE. Repeat the analysis in example 12.9 to find the msNE of the Anticoordination game, and depict the best responses for each player. Show that the best responses cross at three points: (1) at $(p, q) = (0, 1)$ at the corner of the graph, which corresponds to the psNE (*Stay, Swerve*); (2) at $(p, q) = (1, 0)$ at the top-left corner of the graph, corresponding to the psNE (*Swerve, Stay*); and (3) at an interior point where both p and q are strictly between 0 and 1, illustrating the msNE of the game.