

Homework 4

1. Consider the chicken game:

	L	R
T	6,6	2,7
B	7,2	0,0

Show that $(\frac{1}{3}, \frac{1}{3}, \frac{1}{3}, 0)$ is a correlated equilibrium of this game.

2. Let $s \in S$ be a Nash Equilibrium profile. Show formally that $\prod_{i=1}^N s^i \in \Delta(A)$ is a correlated equilibrium.

3. Show that every convex combination of correlated equilibrium payoff profiles is a correlated equilibrium payoff profile.

4. Show that every action used with positive probability in a correlated equilibrium is rationalizable.