Stat 155 Fall 2009: Homework 5

Due November 12, 2009

- *Please show all your steps. No credit will be given for just giving the answer, without any supporting work.*
- *Grading: 3 points for a complete solution, 2 points for an almost correct solution, 1 point for some correct work, 0 otherwise*

The numbers on the following problems refer to the version online on 11/6/2009.

1. Problem 3.11, from *Game Theory, Alive* : Show that, in a symmetric game, with $A = B^T$, there is a symmetric Nash equilibrium. One approach is to use the set $\tilde{K} = \{(x, x) : x \in \Gamma_m\}$ in place of K in the proof of Nash's theorem.
2. Problem 3.13, from *Game Theory, Alive*: **"A sequential congestion game"**
3. Problem 3.14, from *Game Theory, Alive*: **"A simultaneous congestion game"**