Homework 1: Due ?

You are strongly encouraged to work together as this maximizes the amount of mathematics that you learn. However, the working together stage should only include discussions where you figure out the solutions. The final "writing up of the solutions" should be done alone.

I. Problems for everyone.

1. Problem 1 on page II-14 of Ferguson's note.

2. Problem 2 on page II-14 of Ferguson's note.

3. Problem 3 on page II-14 of Ferguson's note.

4. Problem 11(a) and (b) on page II-30 of Ferguson's note.

5. Problem 12(a) on page II-30 of Ferguson's note.

II. More advanced problems for graduate students and others who want to.

1. In the general's game done in class, show that player I has a unique optimal strategy (among all invariant and noninvariant strategies). Does player II also have a unique optimal strategy (among all invariant and non-invariant strategies)?

2. Assume there is a move i for player I in a game with the property that no optimal strategy gives i positive probability. Does it then follow that i can be removed by using domination?

III. Problems to do but not to hand in.

1. Problems 9-10 on page II-14 of Ferguson's notes and as many of the problems on pages II 28-30 as you feel like.