

### Day 7: Homework

**Question 1** : Explain why an Evolutionary Stable Strategy cannot be strictly dominated by another strategy. (You may use the theorems in today's worksheet without proof).

**Question 2** : Create a  $2 \times 2$  payoff matrix that has a weak Nash Equilibrium that is NOT an Evolutionary Stable Strategy. Create another  $2 \times 2$  payoff matrix that has a weak Nash equilibrium that IS an Evolutionary Stable Strategy.

**Question 3** : Go to [http://oyc.yale.edu/sites/default/files/problemset5\\_1.pdf](http://oyc.yale.edu/sites/default/files/problemset5_1.pdf). Do question 2, but replace question 2(a) with "find the pure strategy Nash equilibria of this game."