

**HOMEWORK #4 (PART 2 OF 2)**  
**Due Dec 2 IN CLASS**

NO LATE SUBMISSION IS ACCEPTED

Please TYPE and STAPLE your work

Graphs and formulas can be drawn by hand

**The number of points here sums up to 12**

**QUESTION 4.7 (3 pts)**

Can a game with 2 players and 2 strategies have exactly two Nash Equilibria such that one of them is also Dominance Equilibrium? If yes, give an example of such game. If no, explain.

**QUESTION 4.8 (3 pts)**

Suppose that you observe market demand  $P = 17 - 3Q$ . You also observe market supply  $P = 1 + 5Q$ . You know that this market exhibits a detrimental externality of \$4. Suppose the government decides to introduce a Pigouvian tax on this market. Draw the diagram for the market including the tax. Mark areas on the graph with letters and construct the surplus table before and after the tax. Calculate the Consumer Surplus before and after the tax.

**QUESTION 4.9 (3 pts)**

Think about depletable and excludability. Give four original examples of Depletable/Excludable, Depletable/non-Excludable, non-Depletable/Excludable, and non-Depletable/non-Excludable goods.

**QUESTION 4.10 (3 pts)**

The World Bank is an international institution sponsored mostly by the governments of the US and Western Europe. The main goal of the World Bank is to give loans to the poor countries. Usually the interest rate that the World Bank is charging is reasonable (some poor countries cannot get money elsewhere because they have bad reputation on the international loan markets and nobody wants to lend them money). Describe in a few sentences the hypothetical situation, which would be called the moral hazard problem. Describe in a few sentences the hypothetical situation, which would be called the adverse selection problem.