EEPlOI/ECON125: GS1 Comments on Problem Set I

Median: 87.5, Mean: 83.2

General:
(1) Staples were a great invention and should be used whenever possible.
(2) Most problem sets were very neat and easy to grade: Thank you!
(3) We know that there are old assignments on the website with similar problems to those asked. However, blatant copying of previous answer keys word-for-word constitutes plagiarism and a grade of zero on a problem set. Be very careful in future problem sets.

Question #1
In general, most of the answers to this question were very thorough and demonstrate a good understanding of the material. The students who did have trouble with this section should carefully review their answers and the answer key- this type of analysis will most likely make a strong appearance on the midterm.

Three general comments:
• Many individuals did not completely label their graphs with areas showing consumer surplus, producer surplus, government revenue/outlay, TEC, and DWL. The question specifically requested that problems be solved both algebraically and graphically.
• A similar, though much less common problem (only about 5-8 students) was the failure to show any calculations. All that is required is to show the formulas used and the main steps used to solve the problems.

More importantly, the main conceptual problems that came up rather frequently included:
Failure to include total externality cost (TEC) and/or government revenue/outlay (G) within the calculation of total social welfare. Deadweight loss (DWL). First of all, many people did not realize that DVVL-O under the social optimum (La) or that DWL-O under competition or monopoly when using an optimal tax/subsidy (Le) (because production is at social optimum). Many people had trouble identifying DWL on the graph.
Many people had trouble with Ld and Le. The level of the optimal tax and subsidy always needs to be calculated at the optimal level of output (Q*).

Question #2
In this problem, there was no marginal private cost (MPC) mentioned. In this case, assume that MPC is zero, or that the MB given has already subtracted the MPC producers face.

Most people correctly calculated the quantities in part (a) and part (b). In (c), a number of people were confused about the difference between total gains from bargaining and the distribution of those gains. For example, if the dead-weight loss (DWL) at Q=500 is 16,667, then the total possible gains of moving from Q=500 to Q*=166 2/3 are 16,667. This is true even if the residents pay more than the minimum amount that the refineries are willing to accept. Even if the residents pay the entire externality cost that is foregone, the gains are still 16,667 (the gains accrue to the refineries, not the residents). Who receives the gains is a question of distribution.

In part (d), most people understood that violations of the Coase Theorem would lead to an inefficient outcome (high transaction costs, lack of perfect information). Citing this was sufficient information for partial credit. However, to get full credit, we expect that you are able to relate the required assumptions to the specific situation described in the problem.

Essay Question:
Most people seemed to have a good understanding of the gains and losses associated with each policy. There were also some extremely creative policies suggested.

There did, however, seem to be considerable confusion regarding the market solution. A market solution implies a laissez-faire (no intervention) sort of result. This means the assignment of property rights and direct bargaining between the two parties. In the case at hand, we thought that this seemed pretty infeasible, given high transaction costs and imperfect information. The violation of even one of these conditions makes the Coase Theorem fail, and here we have them both.

Another little note: be sure to read the questions carefully and answer all parts. Answering the questions posed was a minimum requirement; people who received full credit were creative and concise in their essays but did not limit themselves to the four mandatory points.