

# General Comments on Problem Set 9

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In general, students solve questions well in Problem Set 9. The biggest problem lies in Part e) of Question 1.

(1) Part c) and d) of Question 1.

If students do not understand why I set an upper bound for average marginal utility of visitors, it is not a problem. Most of students knew how to compute the lower bound, 50, but remember to report at least 50, not necessarily equal to 50.

c) is the most important part in the whole question. The majority answered correctly, yet a considerable number of them had a wrong logic. In this case, if you look for the quantity which renders the smallest gap between marginal cost and marginal social benefit, you can find the optimal one equal to 2. However, the reasoning is wrong. Use the criterion I gave you in class.

(2) Part e) of Question 1.

Many students did not have a good reason. I basically spotted three different wrong reasons. First, performances should be public goods so that the mayor should not charge anything. This reasoning confounds cause and effect. Recall that since the mayor does not charge to citizens and puts performances in the open square, performances become public goods. There is no rule saying that performances should be public goods. Second, if the mayor sets the price equal to average marginal utility, the gap between the price and marginal utility would be zero. But this is never a problem for a consumer to purchase goods and services. Actually in many cases, the marginal utility should be equal to the price in market equilibrium. Check again how to derive demand from marginal utility. Third, someone reported price discrimination. Somehow it is a discrimination since citizens and visitors are treated differently. But it is irrelevant to the failure of the plan.

(3) Part a) of Question 2.

Always remember a demand function is a function of prices but the marginal/average revenue (cost) are functions of quantities. Also do not use  $x$  or  $y$  to derive functions here. Just use  $P$  (price),  $Q$  (quantity),  $MR$  (marginal revenue) or others.

(3) Part d) of Question 2.

When we discuss about a welfare change, we must set a base. Here we use CS and PS in the market equilibrium under perfect equilibrium. Then we compute the counterparts under monopoly and the change. Some of students only computed the CS and PS under monopoly and said that consumers lose the most because CS is smaller than PS. This is a wrong reason.