## Econ 160, Spring 2014, Hanes Answers to second midterm

If your first question's answers were in this order:

- 1. In order to maximize profits in the short run, a firm should produce the quantity for which
- a. marginal revenue exceeds marginal cost by the greatest amount.
- b. marginal cost is minimized.
- c. average total cost is minimized.
- d. marginal cost equals marginal revenue.
- e. none of the above

multiple choice answers are:

1d

2b

3e

50

4c

5d

6b

7c

8d

9a

10a

11b

12c

13a

14d

15e

16d 17d

18c

19b

20a

20a 21b

22a

23e

24a

25c

26d

27e

28e

29b

30c

31e

32c

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multiple choice answers are:

1b

2c

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5c

6b

7b

8a

Oa Oa

9e

10a 11c

12d

13e

14a

15b

16d

17d

18b

19c 20a

21a

22b

23c

24d

25e

26a

27d

28e

29a

30c

31e

32b

## Written questions

1. Explain the difference between a policy change that is a Pareto Improvement or "PI", and a policy change that is a Potential Pareto Improvement or "PPI." Write in *full sentences* with no errors in spelling or grammar - I will take off for those. You don't need to use all the space below. A good answer would be two or three sentences. There is lots of extra space for you to try a first draft, scratch it out and make a second draft if you want.

Begin your answer like this: "A policy change is a PI if....."

- 10 pts for content, 10 pts for spelling etc. But no credit for a grammatically correct answer that is totally irrelevant.
- A policy change is a PI if it makes everyone better off, or makes at least one person better off and makes no one worse off. A policy change is a PPI if it makes some people better off and some people worse off, but the gains to the winners are greater than the losers' losses, so that theoretically the winners could pay money to the losers and make everyone better off than they were before. Or you could say A policy change is a PPI if it makes some people better off and some people worse off, but it creates an increase in net social benefot (ot total surplus), so that theoretically the winners could pay money to the losers and make everyone better off than they were before.

Note that the compensation does not actually take place.

It has nothing to do with the relative number of winners and losers.

- 2. All the taxes that we have considered have been "per unit" taxes, in which the tax is a certain amount of money per unit bought or sold. Another kind of tax is an "ad valorem" tax, which is a certain percent of the good's before-tax price (like sales taxes). The graph below depicts a perfectly competitive market without a tax.
  - a. On the graph, draw lines to show what happens if the government imposes an ad valorem tax of exactly fifty percent, collected from sellers.
    - b. As we do in class, use letters to mark areas of the graph. Using your letters,

What is the tax revenue? $A + B$	T
What is the deadweight loss created by the tax?	 Z

