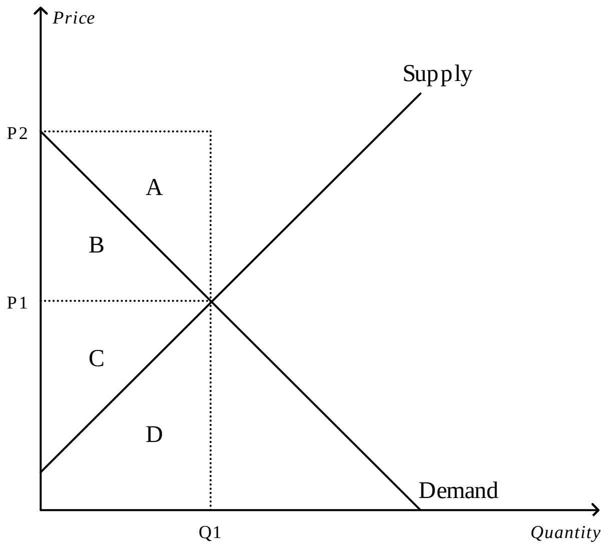
Economics 160 Micro Principles Hanes
Spring 2012

Name (given name then surname)____________________________________

TA Name ____________________________________

Second midterm. Look over the whole test before you begin. Good luck!
The exam has 37 multiple choice question at 5 pts each, and one longer question for 30 points.

For 1. and 2.



1. Which area represents consumer surplus when the price is P1?
a. A b.B c. C d. D

2. Which area represents producer surplus when the price is P1?
a. A b.B c.C d. D

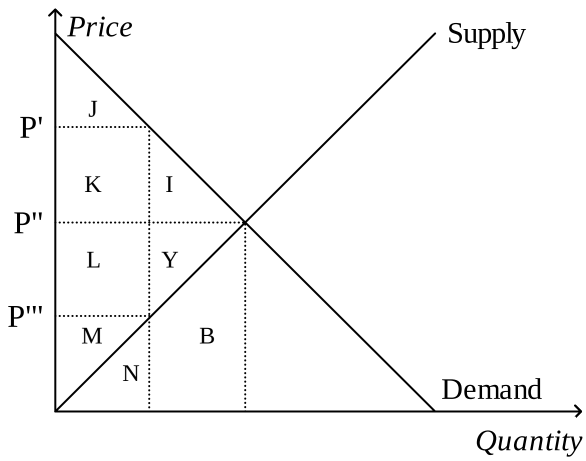
3. When the government places a tax on a product, the cost of the tax to buyers and sellers
a. is less than the revenue raised from the tax by the government.
b. is equal to the revenue raised from the tax by the government.
c. exceeds the revenue raised from the tax by the government.
d. Without additional information I cannot answer.

4. What is the marginal product of the *second* worker in the firm for which information is given below?

Number of Workers	Total Output
0	0
1	200
2	450
3	600
4	650

a. 450
b. 250 units
c. 200 units
d. 150 units
e. 50 units

For 5., 6. and 7.



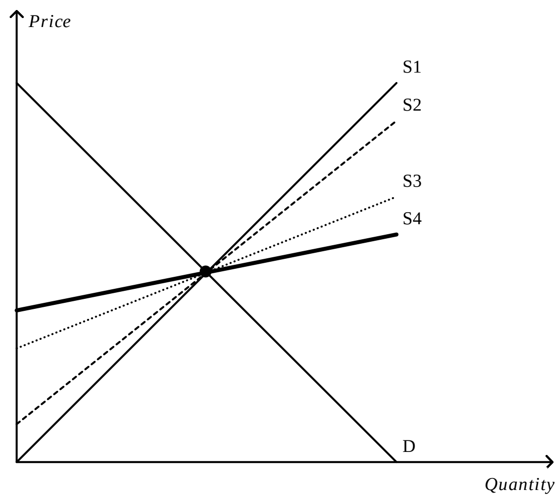
Suppose the government imposes a tax of P' - P''', paid by sellers.

5. Total surplus (including tax revenue) after the tax is measured by the area
a. I+Y.
b. J+K+L+M.
c. I+Y+B.
d. I+J+K+L+M+Y.

6. The tax revenue is measured by the area
a. K+L.
b. I+Y.
c. J+K+L+M.
d. I+J+K+L+M+Y.

7. The deadweight loss due to the tax is measured by the area
a. J+K+L+M.
b. J+K+L+M+N.
c. I+Y.
d. I+Y+B.

8. Suppose the government imposes a $1 tax in each of four markets, represented by supply curves S1, S2, S3, and S4.



The deadweight will be the smallest in the market represented by
a. S1. b. S2. c. S3. d. S4.

9. If the labor supply curve is nearly vertical, a tax on labor
a. has a large deadweight loss.
b. raises a small amount of tax revenue.
c. has little impact on the amount of work that workers are willing to do.
d. results in a large tax burden on the firms that hire labor.

10. Consider a country that allows trade and becomes an importer of coal. Consider the effect on domestic producers of coal, and domestic consumers of coal. Which of the following is true?
a. the losses of the domestic producers of coal exceed the gains of the domestic consumers of coal.
b. the losses of the domestic consumers of coal exceed the gains of the domestic producers of coal.
c. the gains of the domestic producers of coal exceed the losses of the domestic consumers of coal.
d. the gains of the domestic consumers of coal exceed the losses of the domestic producers of coal.

11. Tom quit his $70,000 a year corporate lawyer job to open up his own law practice. In Tom's first year in business his total revenue equaled $150,000. Tom's accounting cost during the year totaled $80,000. What is Tom's economic profit for his first year in business?
a. $0 b. $10,000 c. $60,000 d. $70,000 e. I do not have enough information to answer this

12. Emily opens a restaurant. To buy the building and equipment, she takes a loan from a bank for $200,000, and withdraws $100,000 from her personal savings account which was earning interest. The interest rate on the loan is 6%. The total opportunity cost of capital in Emily's restaurant is
a. $2,000. b. $4,000. c. $12,000. d. $14,000. e. I do not have enough information to answer this

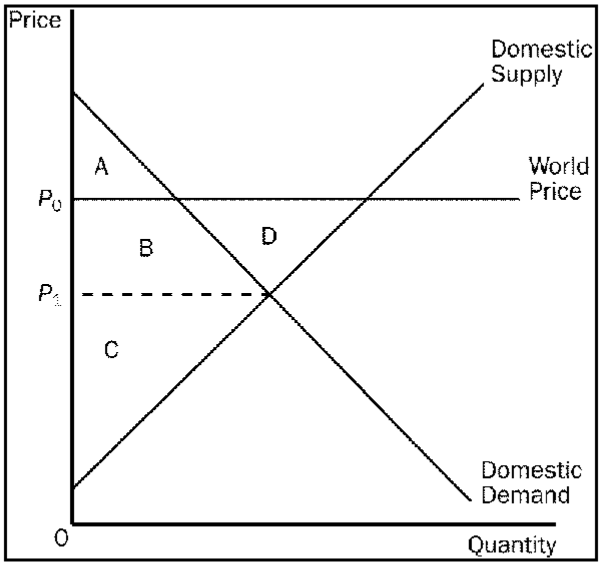
13. When a firm's only variable input is labor, then the slope of the production function measures the
a. quantity of labor.
b. quantity of output.
c. total cost.
d. marginal product of labor.
e. none of the above

14. In the short run, a firm incurs fixed costs
a. only if it incurs variable costs.
b. only if it produces no output.
c. only if it produces a positive quantity of output.
d. whether it produces output or not.

15. Average total cost is increasing whenever
a. total cost is increasing.
b. marginal cost is increasing.
c. marginal cost is less than average total cost.
d. marginal cost is greater than average total cost.
e. none of the above

16. Consider costs in the short run *versus* the long run. The total cost to the firm of producing zero units of output is
a. zero in both the short run and the long run.
b. its fixed cost in the short run and zero in the long run.
c. its fixed cost in both the short run and the long run.
d. its variable cost in both the short run and the long run.

For 17. through 21.



17. Consumer surplus in this market under autarchy, without international trade, is
a. A.
b. A + B.
c. A + B + D.
d. C.

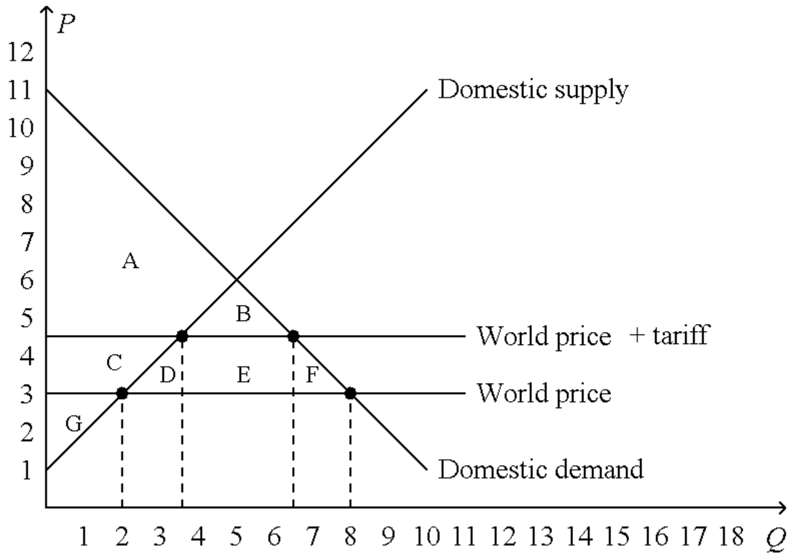
18. Consumer surplus in this market with free international trade is
a. A.
b. A + B.
c. A + B + D.
d. C.

19. Producer surplus in this market under autrachy is
a. A.
b. A + B.
c. B + C + D.
d. C.

20. Producer surplus in this market with free international trade trade is
a. A.
b. A + B.
c. B + C + D.
d. C.

21. The change in total surplus in this market going from autarchy to international trade is
a. D, and this area represents a loss of total surplus because of trade.
b. D, and this area represents a gain in total surplus because of trade.
c. B + D, and this area represents a loss of total surplus because of trade.
d. B + D, and this area represents a gain in total surplus because of trade.

For 22.- 28. The figure below illustrates a tariff.



22. Without a tariff, what is the quantity of imports?
a. 1 and 1/2 b. 2 c. 3 d. 4 and 1/2 e. 6

23. With a tariff, what is the quantity of imports?
a. 1 and 1/2 b. 2 c. 3 d. 4 and 1/2 e. 6

24. Consider a quota that would have the same effect on the domestic price as this tariff. What is the quantity of imports that would be allowed by that quota?
a. 1 and 1/2 b. 2 c. 3 d. 4 and 1/2 e.6

25. What area represents the government revenue raised by the tariff?
a. D + F.
b. B + E.
c. D + E + F.
d. B + D + E + F.
e. None of the above

26. Consider the effect of the tariff on consumer surplus and producer surplus. Compared with free trade, the tariff
a.decreases producer surplus by the area C and decreases consumer surplus by the area C + D + E + F.
b.decreases producer surplus by the area C + D and decreases consumer surplus by the area D + E + F.
c.increases producer surplus by the area C and decreases consumer surplus by the area C + D + E + F.
d.increases producer surplus by the area B + C and decrease consumer surplus by the area D + E + F.

27. What area represents the deadweight loss created by the tariff ?
a. E.
b. D + F.
c. D + E + F.
d. B + D + E + F.
e. None of the above

28. What area represents the deadweight loss created by the equivalent quota?
a. B.
b. D + F.
c. D + E + F.
d. B + D + E + F.
e. None of the above

The following setup is for questions 29. - 32. Policymakers in the country of Mercia are considering a policy change which will have different effects on two different groups of people, Group A and Group B. Based on the further information below, consider whether the policy change is a Pareto improvement, a Potential Pareto improvement, neither, or whether you need more information to say.

29. Suppose the policy will not affect tax revenue. People in Group A would be willing to pay a total of $50 to have the policy change take place. The people in Group B would be willing to pay $5 to have the policy change take place. The policy is:
a) A Pareto improvement
b) A Potential Pareto improvement, but not a Pareto improvement.
c) Neither a Pareto improvement nor a Potential Pareto improvement.
d) I do not have enough information to say

30. Suppose the policy will not affect tax revenue. People in Group A would be willing to pay a total of $50 to have the policy change take place. The people in Group B are indifferent to the policy change. The policy is:
a) A Pareto improvement
b) A Potential Pareto improvement, but not a Pareto improvement.
c) Neither a Pareto improvement nor a Potential Pareto improvement.
d) I do not have enough information to say

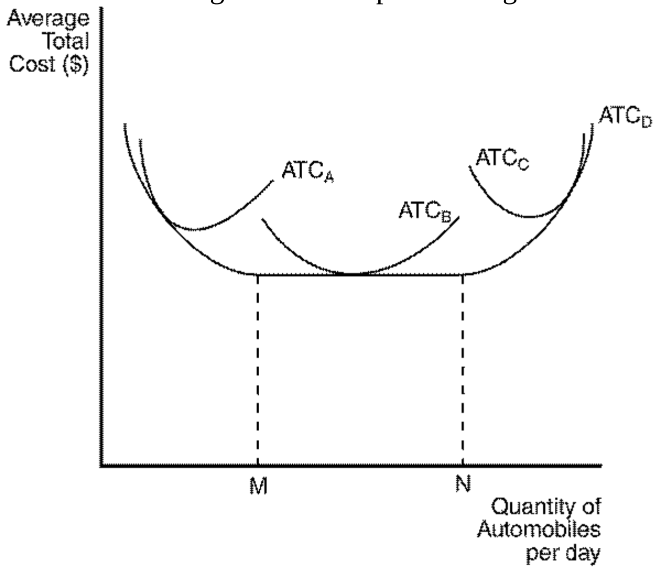
31. Suppose the policy will boost tax revenue. People in Group A would be willing to pay a total of $50 to have the policy change take place. The people in Group B would be willing to pay $50 to have the policy change *not* take place. The policy is:
a) A Pareto improvement
b) A Potential Pareto improvement, but not a Pareto improvement.
c) Neither a Pareto improvement nor a Potential Pareto improvement.
d) I do not have enough information to say

32. Suppose the policy will boost tax revenue. People in Group A would be willing to pay a total of $50 to have the policy change take place. The people in Group B would be willing to pay $60 to have the policy change *not* take place. The policy is:
a) A Pareto improvement
b) A Potential Pareto improvement, but not a Pareto improvement.
c) Neither a Pareto improvement nor a Potential Pareto improvement.
d) I do not have enough information to say

33. Consider a market with very many sellers, and each seller's product is an imperfect substitute for the products of other sellers. This market is an example of:
a) Perfect competition
b) Monopoly
c) Oligopoly
d) Monopolistic competition
e) None of the above

34. If a firm experiences constant returns to scale at all output levels, then its long-run average total cost curve would
a. slope downward.
b. be horizontal.
c. slope upward.
d. slope downward for low output levels and upward for high output levels.

For 35.-37. The figure below depicts average total cost functions for a firm.



35. Which curve represents long-run average total cost?
a. ATC_A
b. ATC_B
c. ATC_C
d. ATC_D
e. ATC_A, ATC_B and ATC_C are all long-run average total cost curves.

36. The firm experiences economies of scale at which output levels?
a. output levels less than M
b. output levels between M and N
c. output levels greater than N
d. All of the above are correct as long as the firm is operating in the long run.

37. The firm experiences constant returns to scale at which output levels?
a. output levels less than M
b. output levels between M and N
c. output levels greater than N
d. All of the above are correct as long as the firm is operating in the long run.

Long question. 30 pts. Use the graphs below to describe a firm producing for a perfectly competitive market. Add lines that represent ATC, AVC and the market price.

a) Draw a firm that is operating but is making negative economic profit (subnormal profit).

b) Draw a firm that is operating and making zero economic profit (normal profit)

c) Draw a firm that has shut down.