

Name (given name then surname) _____

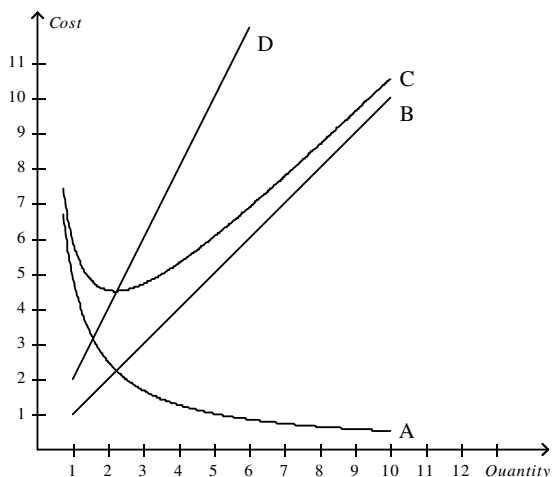
Section leader's name: _____

Time section meets: _____

Second midterm. Look over the whole test before you begin. Good luck!

The exam has 31 multiple choice question at 5 pts each, and two longer questions for 30 points.

This figure is for questions 1) through 3).



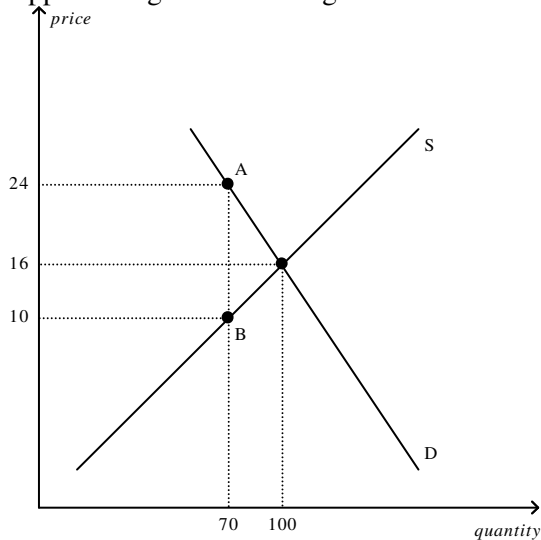
- 1) Which curve is most likely to represent average total cost?
a. A b. B c. C d. D e. That is not depicted by any of these curves
- 2) Which curve is most likely to represent marginal cost?
a. A b. B c. C d. D e. That is not depicted by any of these curves
- 3) Which of the curves is most likely to represent average fixed cost?
a. A b. B c. C d. D e. That is not depicted by any of these curves

This table is for questions 4) - 6). It shows the amount that people are willing to pay for a good. Each person buys at most one unit of the good.

Buyer	Willingness To Pay
Lori	\$50.00
Audrey	\$30.00
Zach	\$20.00
Calvin	\$10.00

- 4) If the price of the product is \$20, then total consumer surplus is:
a. \$110 b. \$100 c. \$80 d. \$40 e. None of the above
- 5) How much would Lori be willing to pay to have the market price fall from \$20 to \$10?
a. \$10 b. \$20 c. \$30 d. \$40 e. None of the above
- 6) How much would Calvin be willing to pay to have the market price fall from \$20 to \$10?
a. \$40 b. \$30 c. \$20 d. \$10 e. None of the above

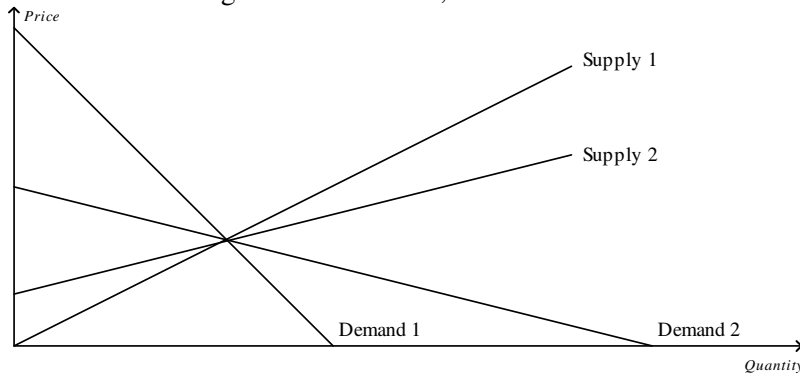
7) Suppose the government begins to collect a tax of \$14 per unit from the sellers in this market:



What happens to the price?

- a. Increases from \$10 to \$16 b. Increases from \$16 to \$24 c. Increases from \$10 to \$24
 d. Increases from \$16 to \$30 e. None of the above

8) This graph shows a number of possible supply and demand curves. Which combination of supply and demand curves will minimize deadweight loss from a tax, as a fraction of tax revenue collected?



- a. Supply 1 and Demand 2 b. Supply 2 and Demand 1 c. Supply 1 and Demand 1 d. Supply 2 and Demand 2

9) This table shows some numbers for a business. What is output if 3 workers are employed?

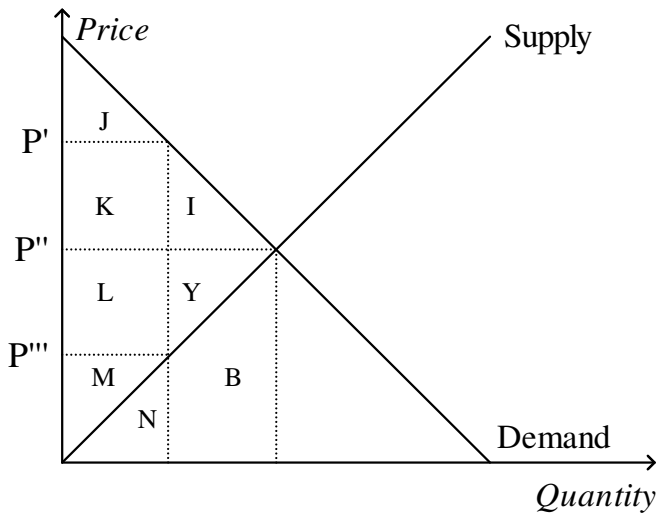
Number of Workers	Marginal Product
0	--
1	30
2	40
3	50
4	40
5	30

- a. 50 b. 70 c. 90 d. 120 e. None of the above

10) Bev has opened her own court-reporting business. In her first year running the business, her revenues net of materials costs was \$100,000. To open the business, she gave up a job that paid her \$25,000 a year. She financed the business by withdrawing a \$20,000 bank account. When she closed the account, the bank representative mentioned that she would have earned \$1000 in interest on the account the following year. It costs Bev \$2000 a year in commuting costs to get to her new business as a court reporter *or* to her old job. What is Bev's economic profit in the first year of running the business?

- a. \$100,000 b. \$75,000 c. \$74,000 d. \$73,000 e. Less than \$73,000

This figure is for questions 11) - 15).

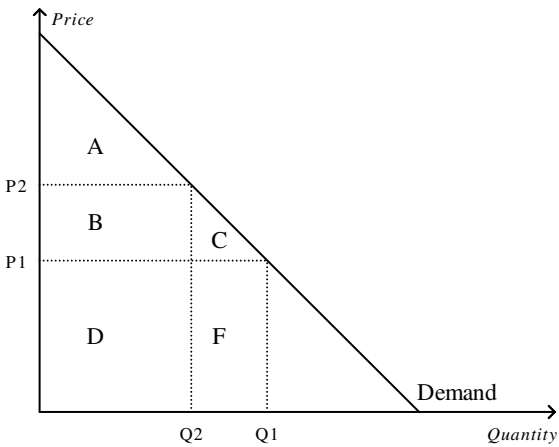


- 11) What is total surplus (or net social benefit) in this market, absent a tax?
 a. $K+L$ b. $I+Y$ c. $L+Y$ d. $J+K+L+M$ e. $J+K+I+L+Y+M$

Now suppose the government imposes a per-unit tax equal to $P' - P''$.

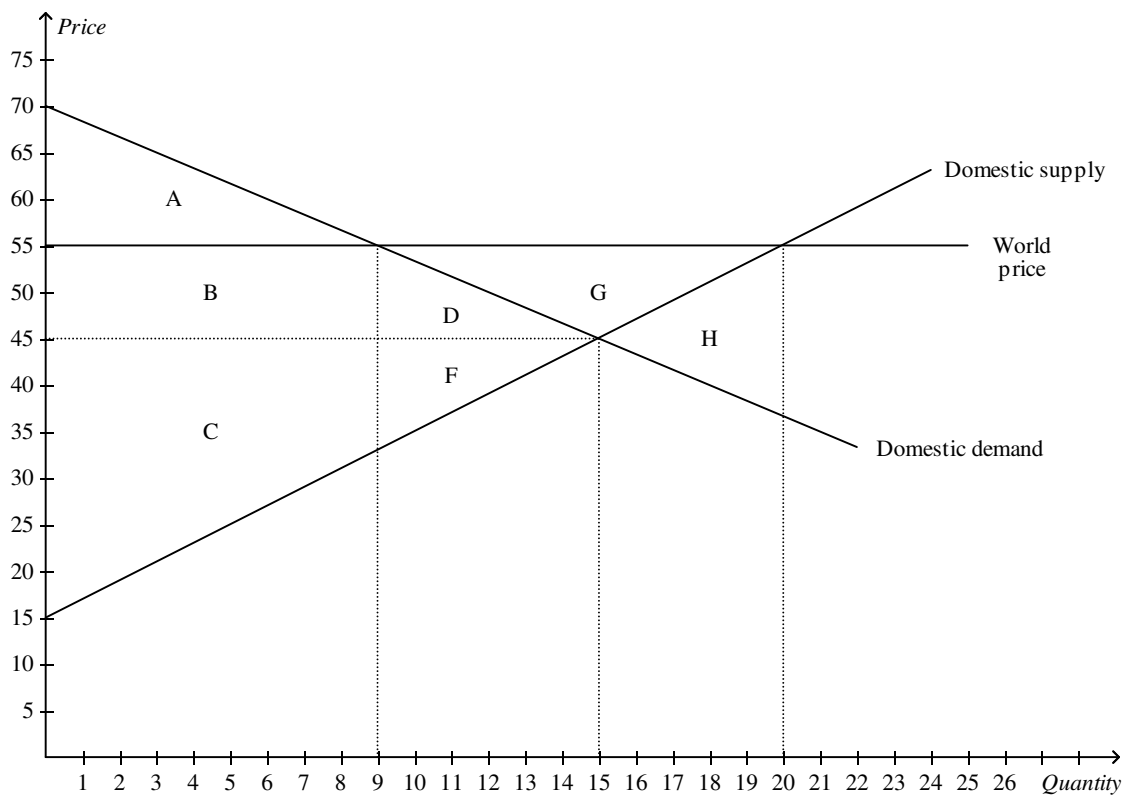
- 12) What is tax revenue?
 a. $K+L$ b. $I+Y$ c. $L+Y$ d. $J+K+L+M$ e. $J+K+I+L+Y+M$
- 13) What is total surplus (or net social benefit) after the tax?
 a. $K+L$ b. $I+Y$ c. $L+Y$ d. $J+K+L+M$ e. $J+K+I+L+Y+M$
- 14) What would producers be willing to pay to get rid of the tax?
 a. $K+L$ b. $I+Y$ c. $L+Y$ d. $J+K+L+M$ e. $J+K+I+L+Y+M$
- 15) What is the deadweight loss due to the tax?
 a. $K+L$ b. $I+Y$ c. $L+Y$ d. $J+K+L+M$ e. $J+K+I+L+Y+M$

- 16) Which area represents the amount of money consumers would be willing to pay to prevent the price in this market from rising from P_1 to P_2 ?



- a. $A+B+C+D+F$ b. $A+B+C+D$ c. $A+B+C$ d. $B+C$ e. A

This graph is for questions 17)-20). It represents the market for wool in Scotland.



17) In the absence of trade (under "autarky"), the equilibrium price of wool in Scotland is

- a. \$45. b. \$55. c. \$70. d. \$15 e. None of the above

18) If Scotland allows international trade in wool,

- a. Scottish consumers of wool become better off and Scottish producers of wool become worse off.
- b. Scottish producers of wool become better off and Scottish consumers of wool become worse off.
- c. Scottish producers and consumers of wool become better off.
- d. Scottish producers and consumers of wool become worse off.
- e. Scottish producers and consumers of wool become better off, but foreign consumers of wool become worse off

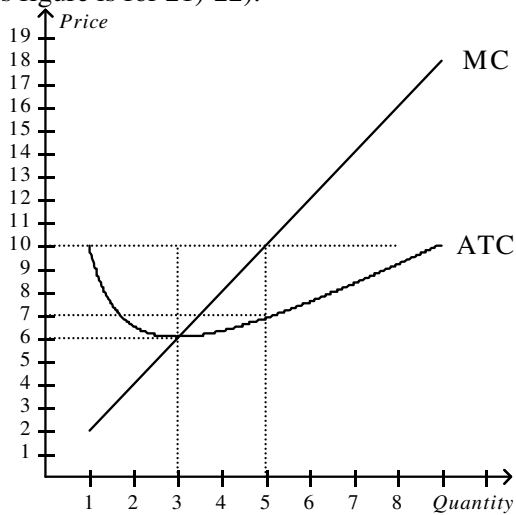
19) Suppose Scotland does *not* allow international trade in wool. How much would Scottish producers of wool be willing to pay to bribe the Scottish government to allow international trade in wool?

- a) Nothing, because opening international trade would hurt Scottish wool producers
- b) An amount of money equal to B+D+G
- c) An amount of money equal to B+D+G+C+F
- d) An amount of money equal to B+D
- e) An amount of money equal to G

20) Assuming Scotland allows international trade in wool, which of the following events could possibly cause Scotland to switch from being an exporter of wool to an importer of wool?

- a. Incomes of domestic citizens increase, and wool is a normal good.
- b. The domestic price of a substitute for wool decreases.
- c. The domestic price of a complement to wool increases.
- d. Wages decrease for domestic workers who produce wool.
- e. None of the above

This figure is for 21)-22).



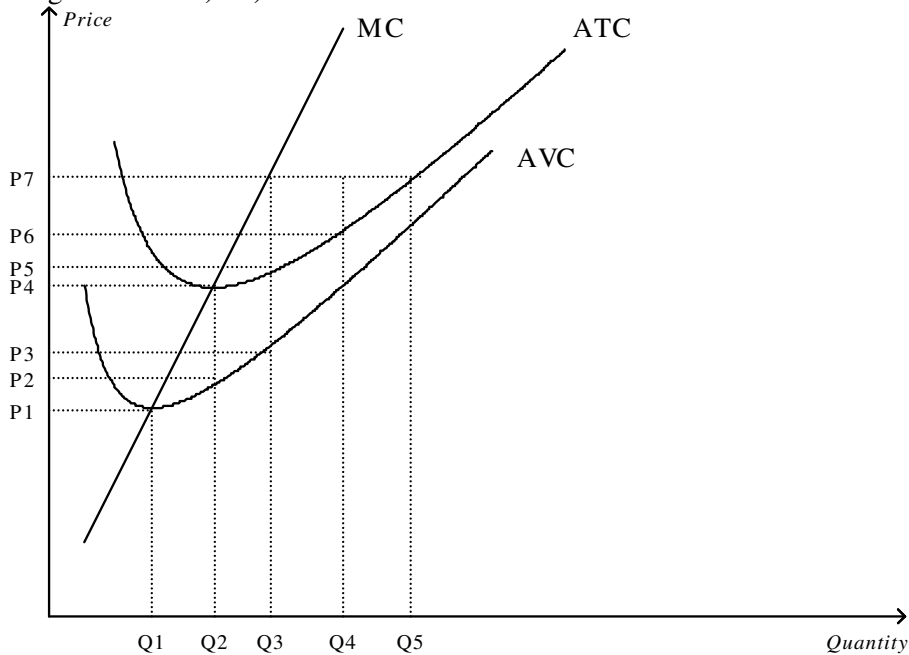
21) What market price will give the firm zero economic profit?

- a. \$0 b. \$6 c. \$7 d. \$10 e. None of the above

22) If the market price is \$10, what is the firm's economic profit?

- a. \$50 b. \$30 c. \$15 d. \$3 e. None of the above.

This figure is for 23)-27)



23) What market price will cause the firm to produce quantity Q2?

- a. P1. b. P2. c. P3. d. P4. e. P5

24) What quantity will the firm produce if the market price is equal to P7?

- a. Q1 b. Q2 c. Q3 d. Q4 e. Q5

25) Which set of prices will cause the firm to choose to produce rather than shut down, but will give the firm less than zero economic profit?

- a. P2 and P3 b. P2, P3 and P4 c. P3, P4 and P5 d. P4, P5 and P6 e. P5, P6 and P7

26) Which set of prices will cause the firm to choose to produce *and* will give the firm positive economic profit?

- a. P2 and P3 b. P2, P3 and P4 c. P3, P4 and P5 d. P4, P5 and P6 e. P5, P6 and P7

27) The firm will choose to shut down if the market price is less than

- a. P1 b. P2 c. P3 d. P4 e. P5

The following questions are about Pareto Improvements (PIs) and Potential Pareto Improvements (PPIs).

At the University of California at Sunnydale, sophomores are not allowed to have cars. In past years, sophomores have been assigned to dormitories in the "Jackson Community." The Jackson Community is located next to the student parking lots. UC Sunnydale's student government has proposed a policy change. It is proposed that the rooms in the Jackson Community be assigned not to sophomores but instead to seniors with cars, because it is handy for a student with a car to be in a room next to the student parking lots. In fact, seniors with cars would be willing to pay money to be assigned to Jackson. The total sum these seniors would be willing to pay to be assigned to Jackson rather than elsewhere is \$5,000. (Of course, no one proposes that this money actually be collected from the seniors.)

28) Suppose that, apart from their proximity to the parking lots, Jackson dorms are relatively undesirable, so that sophomores would be willing to pay something to be assigned to dorms *other* than Jackson. The total amount sophomores would be willing to pay to be assigned to dorms other than Jackson is \$1,000. In this case, the proposed policy change is:
a. a PPI, but not a PI b. a PI c. neither a PI nor a PPI
d. the concepts of PI and PPI cannot be applied here, because we are not talking about markets
e. the concepts of PI and PPI cannot be applied here, because there is no plan to actually collect money from the seniors.

29) Now suppose that, apart from their proximity to the parking lots, Jackson dorms are just like the other dorms on campus, so that sophomores are indifferent as to whether they are assigned to Jackson or to other dorms. In this case, the proposed policy change is:
a. a PPI, but not a PI b. a PI c. neither a PI nor a PPI
d. the concepts of PI and PPI cannot be applied here, because we are not talking about markets
e. the concepts of PI and PPI cannot be applied here, because there is no plan to actually collect money from the seniors.

30) Now suppose that, apart from their proximity to the parking lots, Jackson dorms are relatively desirable, so that sophomores would be willing to pay something to be assigned to Jackson rather than elsewhere. The total amount sophomores would be willing to pay to be assigned to Jackson is \$1,000. In this case, the proposed policy change is:
a. a PPI, but not a PI b. a PI c. neither a PI nor a PPI
d. the concepts of PI and PPI cannot be applied here, because we are not talking about markets
e. the concepts of PI and PPI cannot be applied here, because there is no plan to actually collect money from the seniors.

31) What if Jackson dorms are relatively desirable, and the total amount sophomores would be willing to pay to be assigned to Jackson is \$6,000? In this case, the proposed policy change is:
a. a PPI, but not a PI b. a PI c. neither a PI nor a PPI
d. the concepts of PI and PPI cannot be applied here, because we are not talking about markets
e. the concepts of PI and PPI cannot be applied here, because there is no plan to actually collect money from the seniors.

Written questions.

I) 10 pts. In one or two sentences, define a *sunk cost*. I want a definition, *not* an example. Do not make errors in grammar or spelling. I will take off for such errors.

II) 20 points. The graph below depicts the market for wheat in Prussia under autarky. Suppose that Prussia opens its wheat market to international trade. Prussia begins importing wheat. In response to the imports, Prussia wheat producers persuade the Prussian government to impose a per-unit *tariff* on wheat imports.

- a) To the graph, add lines that show the world price of wheat and the tariff. Label the world price P_w . Label the tariff T .
- b) Prussian consumers of wheat would be willing to pay to get rid of the tariff. The total amount they would be willing to pay can be seen on the graph. Use an "A" to label the areas on the graph - put a little "A" in each of the areas - that, in sum, have a total area equal to the total amount consumers would be willing to pay to get rid of the tariff.
- c) Prussian wheat producers are willing to pay something to keep the tariff. The total amount they would be willing to pay can also be seen on the graph. Use an "X" to label the areas on the graph - put a little "X" in each of the areas - that, in sum, have a total area equal to the total amount producers would be willing to pay to keep the tariff.
- d) The tariff collects revenue. Use "K" to label all of the areas that that, in sum, have a total area equal to the tariff revenue.
- e) The tariff creates deadweight loss. Use "J" to label all of the areas that, in sum, have a total area equal to the deadweight loss.