

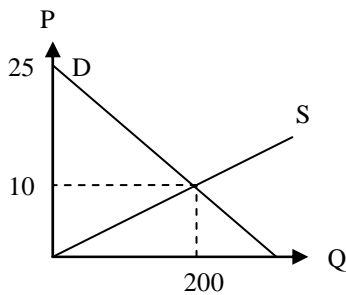
**Brigham Young University Department of Economics**  
**Economics 110 – Principles of Economics**  
**Professor Kerk Phillips – Spring Term 2008, section 1**

**Midterm #2 key**

5/29 (Thu) – 5/30 (Fri) Testing Center

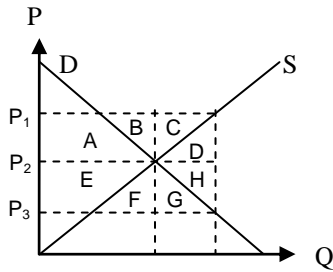
This test is multiple choice, fill in your answers on the answer sheet and do not write on this exam. It is closed book and closed notes. There is no time limit and you may use calculators; either those provided by the testing center or your own as long as it is not a programmable calculator. Read all questions carefully before answering.

Use the following figure to answer questions 1 & 2. The supply and demand curves are straight lines. Prices are in dollars.



1. The amount of consumer surplus is:
  - a) \$3000
  - b) \$2000
  - c) **\$1500**
  - d) \$1000
  - e) none of the above.
  
2. The amount of producer surplus is:
  - a) \$3000
  - b) \$2000
  - c) \$1500
  - d) **\$1000**
  - e) none of the above.
  
3. If demand has the same elasticity as supply (in absolute value), then a sales tax...
  - a) will place a higher burden on producers than consumers.
  - b) **will place equal burdens on producers and consumers.**
  - c) will cause the price received by producers to exceed the net price paid by consumers.
  - d) will generate no revenue for the government.
  - e) none of the above.

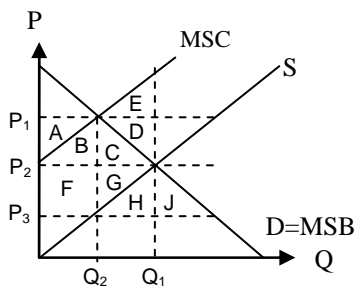
Use the following figure to answer questions 4 – 7. This figure illustrates a subsidy. The block letters are labeling sizes of areas (triangles or trapezoids).



4. The price received by producers after the subsidy is put in place is...
- P<sub>1</sub>**
  - P<sub>2</sub>
  - P<sub>3</sub>
  - zero
  - none of the above
5. The change in government revenue is...
- (A+B+E+F)
  - +(A+B+E+F)
  - +(A+B+C+D)
  - (A+B+C+D+E+F+G+H)**
  - none of the above
6. The change in producer surplus is...
- +(A)
  - +(E+F+G)
  - +(A+B+C)**
  - +(E)
  - none of the above
7. The net loss to society or deadweight loss (ignoring the minus sign) is...
- (A+E)
  - (B+C)
  - (D+H)**
  - (F+G)
  - none of the above
8. Which of the following policies will result in a decrease in total welfare in the absence of any externalities?
- the removal of an import tariff
  - the removal of a production subsidy
  - the imposition of a binding price ceiling**
  - the imposition of a non-binding price floor
  - none of the above will lower total welfare.

9. A socially efficient policy in the face of a negative consumption externality is...
- to subsidize production of the good
  - to subsidize consumption of the good
  - to tax consumption of the good**
  - to ban any production of the good
  - none of the above
10. A Pareto improvement is a change in allocations where...
- everyone is better off
  - everyone is worse off
  - some people are better off and some are worse off
  - no one is better or worse off
  - none of the above, at least one person is better off and no one is worse off**
11. Consider the case of a smoker working in an office full of non-smokers. The Coase Theorem suggests that the negative externality associated with smoking can be efficiently addressed by...
- taxing the smoker by the appropriate amount
  - banning smoking in the office under any circumstances
  - giving the smoker the right to smoke if he wishes, and telling his coworkers to put up with it
  - taxing the tobacco producer the appropriate amount
  - none of the above is remotely related to the Coase Theorem**
12. One example of negative externalities we discussed in class was...
- neighbors mowing their lawns
  - neighbors repairing and riding their motorcycles**
  - neighbors giving away free cheeseburgers
  - neighbors buying their own nuclear weapons
  - none of the above

Use the following figure to answer questions 13 – 16. MSB stands for “marginal social benefit” and MSC stands for “marginal social cost”.



13. The figure above can best be described as illustrating...
- A positive consumption externality
  - A negative consumption externality
  - A positive production externality
  - A negative production externality**
  - none of the above

14. The socially optimal quantity in this case is an amount...

- a) less than  $Q_2$
- b) exactly equal to  $Q_2$**
- c) greater than  $Q_2$  but less than  $Q_1$
- d) exactly equal to  $Q_1$
- e) greater than  $Q_1$

**There is a typo here, the last two should be  $Q_1$ . Almost everyone got this right anyway.**

15. The socially optimal allocation is arrived at by imposing...

- a) a subsidy of size  $(P_1 - P_3)$
- b) a tax of size  $(P_1 - P_3)$**
- c) a subsidy of size  $(P_1 - P_2)$
- d) a tax of size  $(P_2 - P_3)$
- e) none of the above

16. The gain to third parties (neither buyers nor sellers) associated with moving from the market allocation to the socially optimal one is...

- a)  $+(D+E)$
- b)  $+(C+G)$
- c)  $+(C+D+E+G)$**
- d)  $+(C+D+G+H)$
- e) none of the above

Use the following information for questions 17 – 18. Assume zero fixed costs.

Demand Curve		Firms'
Q	P	Total Cost
1	\$20	10
2	\$18	20
3	\$16	30
4	\$14	40
5	\$12	50
6	\$10	60
7	\$8	70
8	\$6	80
9	\$4	90
10	\$2	100

17. With perfect competition the market price is \_\_\_\_ and the quantity produced and consumed is \_\_\_\_.

- a) \$18, 2 units
- b) \$14, 4 units
- c) \$10, 6 units**
- d) \$6, 8 units
- e) none of the above

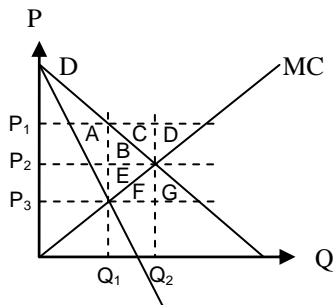
18. With a monopoly the market price is \_\_\_\_ and the quantity produced and consumed is \_\_\_\_.

- a) \$18, 2 units
- b) \$14, 4 units
- c) \$10, 6 units
- d) \$6, 8 units
- e) **none of the above, \$10, 3.5 units**

19. Monopolies...

- a) always earn accounting profits
- b) always earn economic profits
- c) produce more than if they faced competition
- d) **charge higher prices than if they faced competition**
- e) none of the above

Use the following figure to answer questions 20 – 22.



20. The monopolist charges a price of...

- a)  $P_3$
- b)  $P_2$
- c)  **$P_1$**
- d) zero
- e) none of the above

21. The monopolist produces a quantity that is...

- a) less than  $Q_1$
- b) **exactly equal to  $Q_1$**
- c) greater than  $Q_1$  but less than  $Q_2$
- d) exactly equal to  $Q_2$
- e) greater than  $Q_2$

22. The inefficiency associated with monopoly gives a deadweight loss (again ignoring the negative sign) equal to...

- a) (B+C)
- b) **(B+E)**
- c) (C+D)
- d) (E+F)
- e) none of the above

Use the following answers for questions 23 – 25

- a) Increasing returns to scale due to a large fixed cost have lead to a natural monopoly which has lower costs than any potential competitor would have when it started up operating on a smaller scale.
  - b) The government has put barriers in place that do not allow potential competitors to enter the market.
  - c) The firm owns a unique and scarce resource that no potential competitor can replicate.
  - d) More than one of the above reasons is an important cause
  - e) None of the above reasons are relevant
23. Why does DeBeers have a monopoly on diamonds? **C**
24. Why did the British East India Company have a monopoly on tea? **B**
25. Why does Comcast have a monopoly on cable TV service in most of Utah Valley? **D**  
**Many people answered A or D, which are correct, but that means D is most correct. I am giving half a point credit for A or D**
26. A market structure with a small number of competing producers is called...
- a) monopoly
  - b) oligopoly**
  - c) monopolistic competition
  - d) perfect competition
  - e) none of the above
27. Which statement below is true?
- a) Perfect price discrimination leads to worse social welfare than perfect competition.
  - b) Monopolies may make losses in the short-run, but not the long-run**
  - c) Cartels with large numbers of members are easier to enforce than those with small numbers.
  - d) More than one of the above statements is true.
  - e) None of the above statements is true.
28. Dr. Landsburg says seat belts kill because...
- a) he is angry at the government for forcing him to wear one
  - b) people sometimes die from being trapped in a seat belt after an accident
  - c) people drive less safely when they are wearing seat belts**
  - d) all of the above
  - e) none of the above

29. Landsburg cites David Freedman in arguing there are two technologies in the US for producing cars. One is to assemble them in Detroit using US workers & capital. The other is to...
- a) create them entirely in the US using only US material, as well as US labor & capital
  - b) assemble them in Ohio using US workers and foreign capital
  - c) assemble them in Tennessee using foreign workers and US capital
  - d) ship grain across the Pacific Ocean and a few months later cars arrive on other ships.**
  - e) none of the above are cited by Landsburg
30. Which of the following is one of Landsburg's superprinciples for welfare analysis from his chapter on the costs of the drug war and *The Atlantic* magazine?
- a) Only Individuals Matter**
  - b) Some Individuals Matter More than Others
  - c) The Government Matters the Most
  - d) All of the above are among his superprinciples.
  - e) None of the above are among his superprinciples.