

Econ 101-008 Midterm Two Practice Questions

Professor Salemi has not marked the right answers for the practice questions so that students determine what the right answers are and why they are correct. If you are confused by a question, please raise the issue in recitation. Please assume that all demand and supply schedules have normal shapes unless otherwise instructed. Please assume that there are no third party effects unless otherwise instructed.

- Price elasticity of demand is defined as the percentage change in _____ that occurs as the result of a one percent change in _____.
 - Consumer expenditure, price.
 - Quantity demanded, supply.
 - Quantity demanded, price.
 - Consumer expenditure, supply.
- The demand for a Ford Focus (a brand of compact car) is likely to be _____ elastic than the demand for a compact automobile because _____.
 - Less, there are good substitutes for a Focus.
 - Less, an auto accounts for a small part of a consumer's budget.
 - More, there are many different compact cars on the market.
 - More, many drivers are loyal to the Ford brand.
- An economically rational individual is the sole supplier of a special type of varnish that is used for finishing fine furniture. Which of the following would the supplier never do?
 - Lower the price of the varnish.
 - Sell varnish to different customers at different prices.
 - Choose a price for the varnish that implied that demand was elastic.
 - Choose a price for the varnish that implied that demand was inelastic.
- Which of the following would cause the supply of tea kettles to become less price elastic?
 - The tea kettle industry shifts to a production technique that uses specially trained labor.
 - Transportation services improve in the city where most industry firms are located.
 - The invention of a new pump lowers the cost of producing coffee makers.
 - The tea kettle industry replaces a specialized heating element with one that can work in a variety of consumer machines.
- An allocation of goods and services is not efficient if
 - Trades are possible that make both parties better off.
 - Consumer surplus is below its maximum possible level.
 - The distribution of goods is highly unequal.
 - The demand for an important consumer product is highly inelastic.
- Which of the following is an example of a strategy that efficiently reallocates airline seats when a flight is overbooked?
 - Deciding by roll of the dice who will forego their seats.
 - Offering ticket vouchers to individuals who volunteer to give up their seats.
 - Granting seats in the order that ticket holders arrive at the gate.
 - Denying seats to those who paid the least amount for their tickets.
- In Asheville, there are two sources of electric power. A hydroelectric plant produces power at a cost of \$0.04 per KWH. A coal fired generator produces power at a cost of \$0.07 per KWH. Which of the following describes an efficient policy for pricing electricity? The electricity price paid by Asheville customers should...
 - Equal the average of the costs at the two production facilities.
 - Equal the marginal cost of electricity at the plant that supplies them.
 - Equal the lower price provided the hydroelectric plant can meet total customer demand.
 - Equal the higher coal-fired plant price for all levels of customer demand.

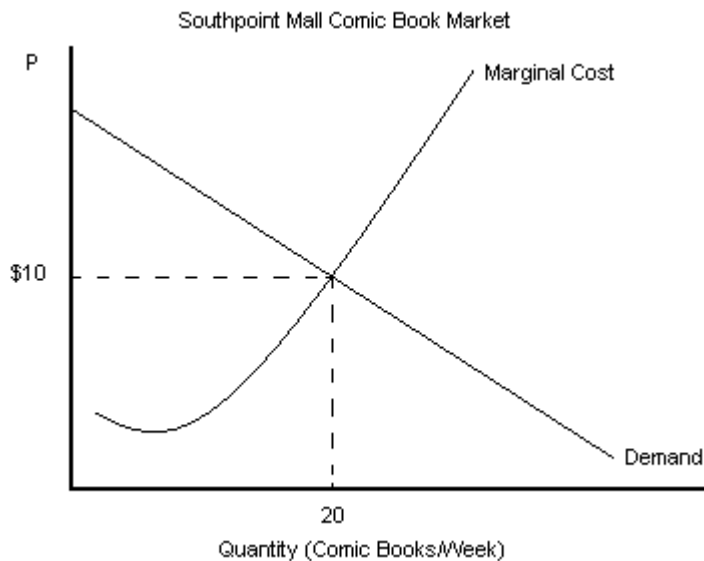
8. Suppose that the price of a can of chicken soup is greater than the marginal cost of the can of soup. Which of the following must be true given that the soup industry is not perfectly competitive?
- The producer of the soup will raise her profits by increasing production.
 - The producer of the soup will lower her profits by increasing production.
 - Welfare improving trades between consumers and the soup producer are possible.
 - Welfare improving trades between consumers and the soup producer are not possible.
9. Harris Teeter can buy orange juice from three growers. The following table shows the cost and capacity of each source including the cost to Harris Teeter of storing and selling the juice.

Source	Capacity (thousands of gallons per day)	Cost per gallon
Florida Farms	2	\$2.50
Citrus Grove	3	\$2.75
Sunny Days	2	\$3.00

- Each day, Harris Teeter sells 4 thousand gallons of juice at a price of 3.00. The allocation of orange juice that results is _____ because _____.
- Inefficient, quantity supplied does not equal the quantity demanded.
 - Inefficient, because price is greater than marginal cost.
 - Efficient, quantity supplied equals the quantity demanded.
 - Efficient, price equals marginal cost.
10. Suppose there are no third party effects associated with production or consumption of good A. Which of the following reasons explains why levying a tax on good A creates an inefficient allocation of goods?
- A tax levied on a good leads to under-consumption by consumers.
 - A tax levied on a good leads to over-consumption by consumers.
 - The tax causes the market price of the good to equal the marginal cost of the good.
 - The tax increases producer surplus.
11. Imagine the state of North Carolina decides to increase the gasoline tax. Who will pay for this tax increase in the short run?
- Consumers, because demand for gasoline is elastic.
 - Suppliers, because consumers do not have good substitutes for gasoline.
 - Consumers, because demand for gasoline is inelastic.
 - Suppliers, because it is easy to obtain gasoline supplies from other states.
12. John runs a business washing cars. Every week he spends \$100 on supplies for his business and earns \$400 washing cars. John's economic profit is _____
- \$300 provided he has no other explicit costs to bear.
 - \$300 which is the difference between his revenue and the cost of his supplies.
 - Unknown, because we do not know how many hours he spends washing cars.
 - Unknown, because we do not know what John could earn if he did not wash cars.
13. ABC Corp makes computer products. In 2006, it introduces a computer monitor that is a big improvement on the previous technology. The public likes the monitor and ABC Corp earns large economic profits in 2006. Which of the following statements correctly explains what is likely to happen to ABC's profits in the coming years? Profits are likely to _____
- Increase because demand for the monitor will be very price inelastic.
 - Decrease provided new firms can use the ABC technology and supply similar monitors.
 - Decrease because ABC will have to pay large legal fees to obtain a patent on the monitor.
 - Increase provided other firms develop similar monitors making the new technology more popular.

14. Mario leases five acres of vineyard from Fredo in Tuscany. With the grapes he grows on Fredo's land, Mario makes wine. When Mario first started making his wine it was little known, sold for \$20 per bottle and Mario made just enough profit to keep him in the business. Then, wine critic Robert Parker began recommending Mario's wine and its price rose to \$60 per bottle. As time passes, who will benefit from this good fortune?
- A. Mario because entrepreneurs take the risks and earn the profits.
 - B. Fredo if the grapes grown in the vineyard are better than grapes grown elsewhere.
 - C. Fredo because land owners take the risks and earn the profits.
 - D. Mario if the grapes grown in the vineyard are better than grapes grown elsewhere.
15. Bill and Jill run a catering business out of their home. Each week they spend \$500 on food, \$100 on advertising and \$50 to rent a truck. They earn \$1200 a week in revenue. Suppose Bill and Jill use \$5000 from their saving account to buy a catering truck. What is the effect of this decision on their economic profit? The decision to buy a catering truck _____
- A. Increases economic profit because it eliminates the weekly truck rental payment.
 - B. Decreases economic profit because the implicit costs of the catering business have risen.
 - C. Increases economic profit if Bill and Jill were earning less than \$50 per week in interest on their \$5000 saving balance.
 - D. Decreases economic profit because Bill and Jill will no longer earn interest on their saving account.
16. By definition, a firm that manufactures squirt guns does not have market power if _____
- A. There are many different brands of squirt guns in the market.
 - B. The firm perceives that it faces a downward-sloping demand schedule for squirt guns.
 - C. The firm uses highly specialized inputs to make its squirt guns.
 - D. The firm believes that raising the price of its squirt guns will result in the loss of all its sales.
17. The Moose Company is the only producer of hair gel in the United States. Moose sells hair gel for \$3.00. A recent study revealed that the cost to Moose of one more bottle of gel is \$3.00. How should Moose respond to the study? Moose should _____
- A. Leave production unchanged because marginal revenue equals marginal cost.
 - B. Decrease production because marginal revenue is greater than marginal cost.
 - C. Increase production because marginal revenue is less than marginal cost.
 - D. Decrease production because marginal revenue is less than marginal cost.
18. If a firm has market power, then its marginal revenue _____
- A. Is less than its price.
 - B. Is negative at quantities where demand is elastic.
 - C. Is zero at the quantity the firm chooses to produce.
 - D. Remains constant as long as price remains above marginal cost.
19. Economists believe that depletion of cod fish in the Atlantic Ocean is a market failure which resulted from _____.
- A. Poor management of fishing fleets.
 - B. The free rider problem.
 - C. The third party costs of pollution
 - D. Failure to assign ownership rights.

20. Jay and Silent Bob are the only people talented enough to create comic books to sell at the local mall. They currently sell about 20 comic books per week and are in the business to earn the highest possible profit. Given the graph below Jay and Silent Bob should:



- A. Draw more comic books.
 B. Draw fewer comic books.
 C. Draw the same amount of comic books.
 D. There is not enough information to answer this question.
21. Which of the following is an example of economic rent reported by R. A. Radford in his article “The Economics of a P.O.W. Camp”?
- A. The episode of the Padre who gained a whole Red Cross parcel through trade.
 B. The trading advantage experienced by prisoners who could speak Urdu.
 C. The fact that the price of coffee was higher in the French area than in the British.
 D. The advantage gained by traders who held their cigarettes until supplies were almost gone.
22. Externalities exist for goods that _____
- A. People tend to consume when they are together in a group.
 B. Have prices that are greater than the marginal social cost of the good.
 C. Represent a large use of social resources.
 D. Create costs that are experienced by people other than the buyers and sellers.
23. Which of the following is an example of a positive externality?
- A. Your neighbors enjoy listening to your garage band.
 B. Soot from a nearby power plant leads you to buy more window cleaner.
 C. The person next to you takes a cell phone call during a concert.
 D. Your family decides to eat more vegetarian meals.

24. Carla supplements her income as a teaching assistant by editing term papers for undergraduates. There are eight students (A-H) for whom she might edit, each with a reservation price given in the following table. None of the students has an alternative to Carla.

Student	Reservation Price
A	\$40
B	\$38
C	\$36
D	\$34
E	\$30
F	\$28
G	\$26
H	\$24

Carla's marginal revenue associated with editing a fifth paper is:

- A. \$14
- B. \$18
- C. \$28
- D. \$32

Use the following table to answer the next two questions. Suppose a power plant is located on the banks of a river. The plant must decide how much hot water to discharge into the stream. If the power plant discharges a large amount of hot water, it is more valuable because it can cool its equipment at low private cost but the fishery is less valuable because the fish grow poorly. If it discharges a small amount of hot water, it is less valuable and the fishery is more valuable. The table gives the values of the power plant and the fishery as a function of the plant's discharge decision.

Hot Water Discharge Decision	Value of the Power Plant	Value of the Fishery
High Discharge	\$1,000,000.00	\$10,000.00
Low Discharge	\$ 990,000.00	\$30,000.00

25. The socially optimal decision is a _____ discharge rate because _____.
- A. High, Much more value is created by the power plant than by the Fishery.
 - B. High, It is very expensive for the plant to cool its equipment by other means.
 - C. Low, low discharge triples the value of the fishery.
 - D. Low, the social value of the power plant and fishery are higher when discharge is low.
26. Suppose there is no law against the plant discharging hot water into the stream. Provided that bargaining is not very expensive and outcomes are easily verified by all, what will happen when bargaining occurs?
- A. The fishery will pay somewhere between \$10,000 and \$20,000 to induce the power plant to choose a low discharge rate.
 - B. The plant will pay the fishery something more than \$10,000 to allow it to choose a high discharge rate.
 - C. The power plant will decide that too much is at stake to bargain with the fishery.
 - D. A tax on hot water discharge will be necessary to obtain the socially optimal outcome.

27. Ironworks is a company in Toledo Ohio that is currently producing 700 tons of sulfur dioxide (SO₂) per year. The following table gives the marginal cost to Ironworks of reducing emission of SO₂ by one ton. The table shows that the firm's marginal cost increases as it undertakes more pollution reduction. The table also gives the Environmental Protection Agency's estimates of the marginal social benefit of reducing SO₂ emissions by Ironworks. The table shows that the marginal benefits decrease as more pollution reduction is achieved.

SO ₂ Reduction In Tons	Marginal Cost per Ton of SO ₂ Reduction	Social Marginal Benefit per Ton of SO ₂ Reduction
0-100	\$50	\$250
100-200	\$100	\$200
200-300	\$150	\$150
300-400	\$200	\$100
400-500	\$250	\$50

The socially optimal level of SO₂ reduction per year is _____ tons. To achieve the social optimum, government should pay Ironworks _____ for each ton of SO₂ that it does not emit.

- A. 200, \$100
 B. 300, \$150
 C. 400, \$150
 D. 500, \$100
28. Suppose there are three companies near the Mississippi river. Each company produces 1600 tons of chemical waste per year which cause water pollution. The government thinks that the total allowable amount of chemical waste per year is 2400 tons and will distribute pollution credits to the companies for free.

Each company has 8 units of credit. Each credit allows a company to emit 100 tons of chemical waste per year. The trading of pollution credits among companies is possible. That is, companies can buy and sell the rights to emit pollutants into the water. However the price of the pollution credit is set by the government. The unit price of the pollution credit is _____ and the pollution reduction that each firm undertakes is _____.

Chemical Waste Reduction	Marginal Cost per Ton of Chemical Waste Reduction		
	Firm 1	Firm 2	Firm 3
0-200	\$100	\$100	\$50
200-400	\$100	\$100	\$100
400-600	\$100	\$150	\$200
600-800	\$150	\$200	\$300
800-1000	\$200	\$300	\$500
1000-1200	\$300	\$350	\$700

- A. \$150; Firm 1 reduces by 600, Firm 2 by 800, and Firm 3 by 1000.
 B. \$150; Firm 1 reduces by 800, Firm 2 by 600, and Firm 3 by 400.
 C. \$200; Firm 1 reduces by 1000, Firm 2 by 800, and Firm 3 by 600.
 D. \$200; Firm 1 reduces by 600, Firm 2 by 800, and Firm 3 by 1000.