

Instructions: Answer all of the following 33 questions (each worth 3 points). Using pencil, mark your answers on the answer sheet provided. Mark the test version number in the "date" space of the answer sheet (the version number is found at the bottom of this page). Print your name and student number clearly on the answer sheet. Fill in the bubbles corresponding to your student number, leaving the top box blank (or inserting a dash there) and filling in the "0" bubble in the top row.

IF YOU FILL OUT THE STUDENT NUMBER OF THE BUBBLE SHEET INCORRECTLY, YOUR EXAM SCORE WILL BE CUT BY 5 POINTS.

Keep this copy of the test - turn in only the answer sheet.

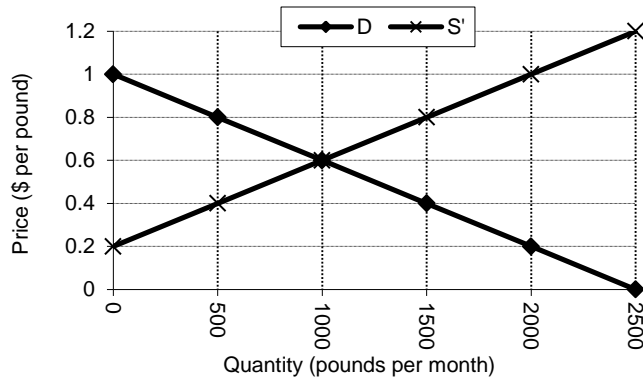
No calculators are allowed in the exam and your answers to the test should consist entirely of your own work. Cheating will result in an "F" grade for the entire class and me paying Mark Zuckerberg to post "Don't hire me! I'm a scumbag who lied and cheated in college!" as your Facebook status for the rest of your life.

Answers will be posted on the class web site as soon as possible. GOOD LUCK!

Tons of Chlorine Reduction per day	Marginal Cost of Chlorine Reduction			
	Patty's Polluting Paper		Ted's Timber Trashers	
	Plant 1	Plant 2	Plant 1	Plant 2
1	0	50	100	75
2	25	100	150	100
3	50	150	200	125
4	75	200	250	150
5	100	250	300	175

1. The table above describes the paper production industry in Sault Ste. Marie, MI, which is made up of two firms, each with two production plants. In the absence of regulation, each plant dumps 5 tons of chlorine into the Saint Mary's river per day. The numerical entries in the table show the marginal cost of reducing chlorine emissions for each of the four plants. If the EPA decreases total chlorine emissions for the industry by 10% (from a total of 20 to a total of 18 tons per day) at the lowest possible cost, the cost of pollution reduction would be ___ per day?

- a. \$0
- b. \$25
- c. \$50
- d. \$225
- e. \$375



2. The figure above depicts the market for sugar in Tallahassee, FL. If a drought destroys some of the sugar cane produced in Tallahassee, a possible new equilibrium price and quantity of sugar could be

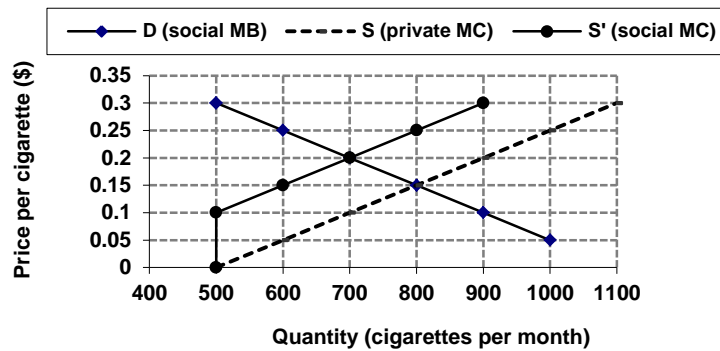
- P = \$0.8; Q = 500
- P = \$0.4; Q = 500
- P = \$0.6; Q = 1000
- P = \$0.8; Q = 1500
- P = \$0.4; Q = 1500

3. In one day, Ray, who is in a band, can produce either 15 sets of song lyrics or 10 sets of keyboard riffs. Jim, who is also in the band, can produce either 10 sets of song lyrics or 5 keyboard riffs per day. Based on this information, the opportunity cost of producing one set of song lyrics for Jim is _____.

- 10 sets of keyboard riffs
- 5 sets of keyboard riffs
- 2 sets of keyboard riffs
- 1/2 set of keyboard riffs

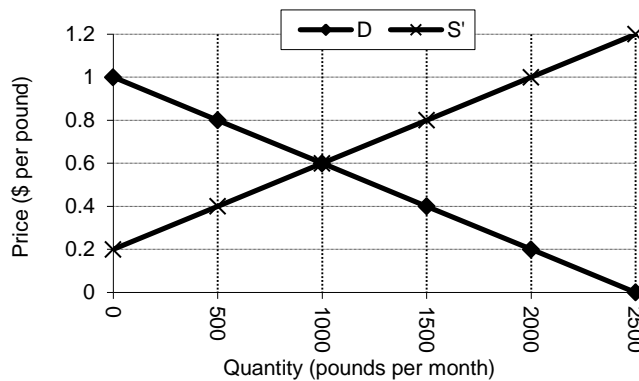
4. Ceteris paribus, the demand for a product will be relatively elastic if

- there are no substitute products available
- spending on the product constitutes a small portion of consumer income
- the product is a luxury
- the consumer has very little time to adjust to a price change
- quantity changes by a relatively small amount when price changes



5. Suppose that the graph above illustrates the marginal benefits and costs of cigarette smoking. S represents the private market supply curve (reflecting private marginal costs) and S' represents the social supply curve (reflecting social marginal costs). D is the demand curve and represents the private and social marginal benefits of smoking. If individuals are currently smoking 700 cigarettes per month, the size of the negative externality from cigarette smoking is:

- a. \$0.05
- b. \$0.10
- c. \$0.15
- d. \$0.20
- e. \$0.25



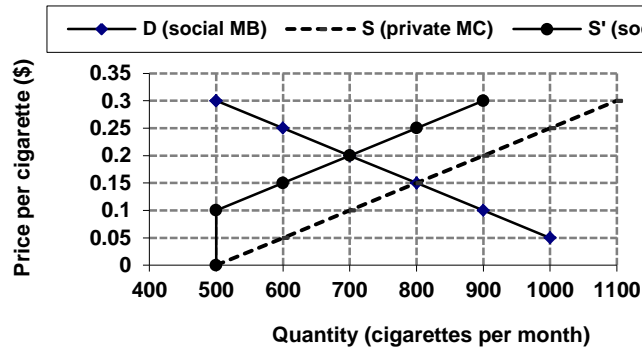
6. The figure above depicts the market for sugar in Tallahassee, FL. If the price of corn sweetener (a substitute good for consumers) falls, a possible new equilibrium price and quantity of sugar could be

- a. P = \$0.4; Q = 500
- b. P = \$0.4; Q = 1500
- c. P = \$0.8; Q = 500
- d. P = \$0.8; Q = 1500
- e. P = \$0.6; Q = 1000

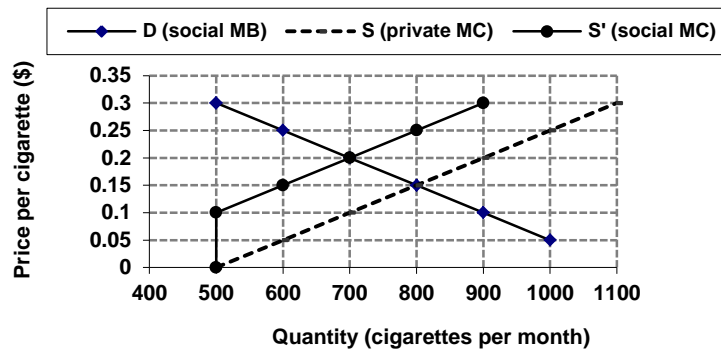
7. In one day, Ray, who is in a band, can produce either 15 sets of song lyrics or 10 sets of keyboard riffs. Jim, who is also in the band, can produce either 10 sets of song lyrics or 5 keyboard riffs per day. Based on this information, if Jim and Ray specialize according to the law of comparative advantage, _____.

- a. Jim will produce song lyrics and keyboard riffs
- b. Ray will produce song lyrics and keyboard riffs
- c. Jim will produce song lyrics and Ray will produce keyboard riffs
- d. Jim will produce keyboard riffs and Ray will produce song lyrics

8. Ceteris paribus, when the supply of sugar increases, sugar prices will change by a smaller amount
- the more elastic is the demand for sugar
 - the more inelastic is the demand for sugar
 - the steeper is the supply curve
 - the steeper is the demand curve
 - both b and d are correct



9. Suppose that the graph above illustrates the marginal benefits and costs of cigarette smoking. S represents the private market supply curve (reflecting private marginal costs) and S' represents the social supply curve (reflecting social marginal costs). D is the demand curve and represents the private and social marginal benefits of smoking. Based on this information, without government intervention in the market, the equilibrium price and quantity of cigarettes will be:
- \$0.2; 800
 - \$0.2; 700
 - \$0.15; 800
 - \$0.15; 700
 - \$0.25; 800
10. Ceteris paribus, when the supply of housing increases, the quantity of houses sold will change by a smaller amount
- The more elastic is the demand for housing
 - The more inelastic is the demand for housing
 - The flatter is the supply curve
 - The flatter is the demand curve
 - Both a and d are correct



11. Suppose that the graph above illustrates the marginal benefits and costs of cigarette smoking. S represents the private market supply curve (reflecting private marginal costs) and S' represents the social supply curve (reflecting social marginal costs). D is the demand curve and represents the private and social marginal benefits of smoking. Based on this information, the socially optimal price and quantity of cigarettes is:

- \$0.2; 800
- \$0.2; 700
- \$0.15; 800
- \$0.15; 700
- \$0.10; 500

12. When the price of paper was \$10.00 per unit, total spending on paper was \$100,000 per day. When the price of paper fell to \$8.00 per unit, total spending on paper rose to \$125,000 per day. This indicates that in this price range, the demand for paper is

- perfectly inelastic
- inelastic
- elastic
- unitary elastic

13. The price elasticity of demand is equal to

- the percent change in the price of a good divided by the percent change in the quantity demanded of the good
- the percent change in the quantity demanded of a good divided by the percent change in the price of the good
- the percent change in the demand for a good divided by the percent change in consumers' incomes
- the percent change in the price of a good divided by the percent change in the quantity supplied of the good

14. If the demand for a good is relatively elastic, an increase in the price of the good will generate

- an increase in quantity demanded for the good and an increase in total revenue
- an increase in quantity demanded for the good and a decrease in total revenue
- a decrease in quantity demanded for the good and an increase in total revenue
- a decrease in quantity demanded for the good and a decrease in total revenue
- an decrease in quantity supplied and an increase in quantity demanded

15. The year is 1957 and Jackie, who lives in New York, loves to go to New York Mets, New York Yankees, New York Giants, and Brooklyn Dodgers baseball games. He currently pays \$3.00 for a game ticket. If the Yankees increase the price of tickets to their baseball games to \$3.50, Jackie is likely to have a _____ since there are many substitute teams' games available.

- relatively elastic response to this price change
- perfectly inelastic response to this price change
- unit elastic response to this price change
- relatively inelastic response to this price change

Quantity Demanded (tons per day)	Price per Ton	Quantity Supplied (tons per day)
100	0	0
80	100	30
70	150	45
60	200	60
40	300	90
30	350	105
20	400	120
0	500	150

16. The table above shows the demand and supply for potatoes. Suppose the government restricts the price to be no more than \$100 per ton. At this price, the quantity sold will be ___ tons per day and total revenue from potato sales will be ___ per day.

- 30; \$3,000
- 80; \$8,000
- 30; \$10,500
- 60; \$12,000

17. Ceteris paribus, when the price of onions increases, people buy more garlic. You infer from this that onions and garlic are _____.

- normal goods
- complements
- substitutes
- inferior goods

18. When the price of ski passes rises by 10%, the quantity of ski passes demanded falls by 5%. This implies that the demand for ski passes is

- 1/2, elastic
- 1/2, inelastic
- 2, elastic
- 2, inelastic
- none of the above

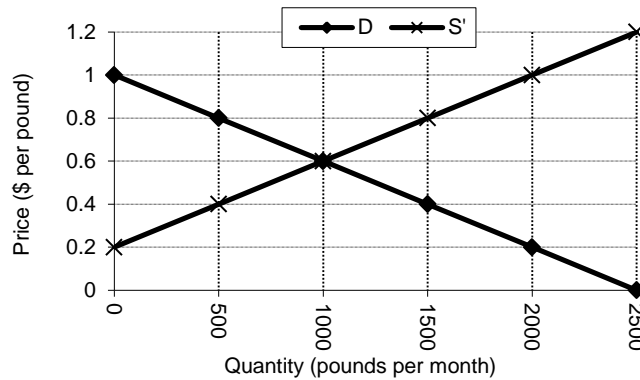
19. The year is 1957 and Jackie, who lives in New York, loves to go to New York Mets, New York Yankees, New York Giants, and Brooklyn Dodgers baseball games. He currently pays \$3.00 for a game ticket. In 1958, the Giants and the Dodgers both move to California. These teams' moves will likely ___ Jackie's elasticity of demand for New York Yankees baseball tickets.

- increase
- decrease
- not change
- stupefy

20. Skiing at Bridger Bowl and riding the Streamline Bus to Bridger Bowl are complement goods. Ceteris paribus, if the price of riding the Streamline Bus to Bridger Bowl rises, what can we expect to happen?

- the demand for skiing at Bridger Bowl will decrease
- the demand for rides on the Streamline Bus will decrease
- the demand for rides on the Streamline Bus will increase
- the supply of skiing at Bridger Bowl will decrease
- a and c are both true

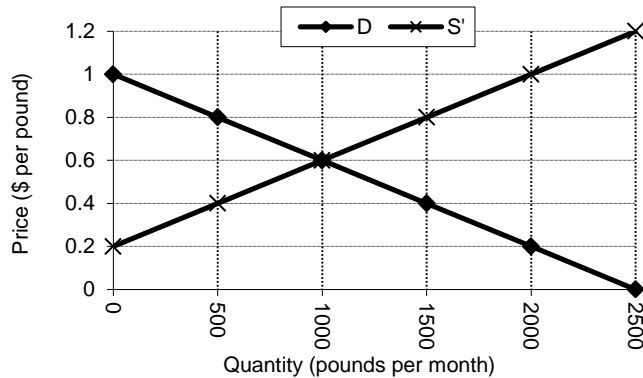
21. Which of the following will result in an increase in the quantity demanded of Canadian wheat, ceteris paribus?
- a decrease in the price of Canadian wheat
 - a decrease in the number of farmers growing Canadian wheat
 - an increase in the cost of producing Canadian wheat
 - a decrease in the price of U.S. wheat
 - all of the above



22. The figure above depicts the market for sugar in Tallahassee, FL. Suppose the government imposes a price floor of \$0.80 per pound. At this price floor, the quantity of sugar supplied will be ___ pounds per month and the quantity of sugar demanded will be ___ pounds per month. The total revenue from sugar sales will be ___ per month.
- 500; 500; \$400
 - 1500; 1500; \$1200
 - 500; 1500; \$400
 - 1500; 500; \$400
 - 1000; 1000; \$600

Quantity Demanded (tons per day)	Price per Ton	Quantity Supplied (tons per day)
100	0	0
80	100	30
70	150	45
60	200	60
40	300	90
30	350	105
20	400	120
0	500	150

23. The table above shows the demand and supply for potatoes. In an effort to help consumers, suppose the government restricts the price of potatoes to be no more than \$100 per ton. At this price, consumer surplus is ___ per day.
- $(.5 \cdot 30 \cdot \$150) + (30 \cdot \$250) = \$9,750$
 - $(.5 \cdot 30 \cdot \$150) = \$2,250$
 - $(.5 \cdot 60 \cdot \$300) = \$9,000$
 - $(.5 \cdot 30 \cdot \$100) = \$1,500$



24. The figure above depicts the market for sugar in Tallahassee, FL. Suppose the government imposes a price floor of \$0.8 per pound. At this price floor, consumer surplus will be ___ per month.

- a. $(.5 \cdot 500 \cdot \$0.2) + (\$0.4 \cdot 500) = \$250$
- b. $(.5 \cdot 1000 \cdot \$0.6) = \300
- c. $(.5 \cdot 500 \cdot \$0.2) = \50
- d. $(.5 \cdot 500 \cdot \$0.4) = \100

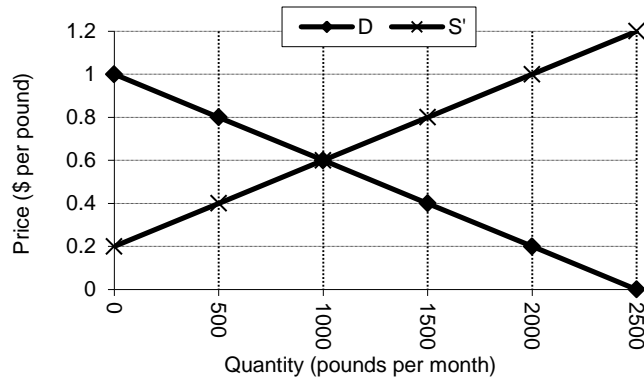
25. If potatoes are an inferior good for Anne, an increase in her income would

- a. shift her demand curve for potatoes to the left
- b. shift her demand curve for potatoes to the right
- c. cause her to move upward along her existing demand curve for potatoes
- d. cause her to move downward along her existing demand curve for potatoes
- e. cause no change in her purchases of potatoes

Tons of Chlorine Reduction per day	Marginal Cost of Chlorine Reduction			
	Patty's Polluting Paper		Ted's Timber Trashers	
	Plant 1	Plant 2	Plant 1	Plant 2
1	0	50	100	75
2	25	100	150	100
3	50	150	200	125
4	75	200	250	150
5	100	250	300	175

26. The table above describes the paper production industry in Sault Ste. Marie, MI, which is made up of two firms, each with two production plants. In the absence of regulation, each plant dumps 5 tons of chlorine into the Saint Mary's river per day. The numerical entries in the table show the marginal cost of reducing chlorine emissions for each of the four plants. The **total cost** of reducing chlorine emissions by 2 tons per day from Plant 2 at Patty's Polluting Paper Company is ___.

- a. \$50
- b. \$75
- c. \$125
- d. \$150



27. The figure above depicts the market for sugar in Tallahassee, FL. Suppose the government imposes a price floor of \$0.8 per pound. At this price floor, deadweight loss will be ___ per month.

- a. $(.5 \cdot 500 \cdot \$0.2) = \50
- b. $(.5 \cdot 500 \cdot \$0.2) + (\$0.4 \cdot 500) = \$250$
- c. $(.5 \cdot 1000 \cdot \$0.4) = \200
- d. $(.5 \cdot 500 \cdot \$0.4) = \100

28. The price of feed corn in the US has risen by about 23% since ethanol subsidies took effect in 2004. Some producers attribute this to a decrease in the supply of feed corn. Others attribute it an increase in the demand for feed corn by cattle producers. How can we determine which producers are right?

- a. it depends on whether the demand curve or the supply curve changed first
- b. if the equilibrium quantity of corn sold decreased, then the dominant cause must have been the supply shift in the market for corn
- c. if the equilibrium quantity of corn sold decreased, then the dominant cause must have been the demand shift in the market for corn
- d. if the equilibrium quantity of corn sold increased, then the dominant cause must have been the supply shift in the market for corn

Quantity Demanded (tons per day)	Price per Ton	Quantity Supplied (tons per day)
100	0	0
80	100	30
70	150	45
60	200	60
40	300	90
30	350	105
20	400	120
0	500	150

29. The table above shows the demand and supply for potatoes. At equilibrium, total revenue from potato sales is ___ per day.

- a. \$12,000
- b. \$6,000
- c. \$200
- d. \$8,000
- e. \$3,000

30. The political consulting firm Dewey, Cheetham, and Howe has estimated that when the price of attack ads rises, the use of campaign rallies by political candidates also rises. This implies that political attack ads and campaign rallies are
- complement goods
 - substitute goods
 - disgusting goods
 - unrelated goods

Tons of Chlorine Reduction per day	Marginal Cost of Chlorine Reduction			
	Patty's Polluting Paper		Ted's Timber Trashers	
	Plant 1	Plant 2	Plant 1	Plant 2
1	0	50	100	75
2	25	100	150	100
3	50	150	200	125
4	75	200	250	150
5	100	250	300	175

31. The table above describes the paper production industry in Sault Ste. Marie, MI, which is made up of two firms, each with two production plants. In the absence of regulation, each plant dumps 5 tons of chlorine into the Saint Mary's river per day. The numerical entries in the table show the marginal cost of reducing chlorine emissions for each of the four plants. If the EPA requires each firm to reduce its daily emissions by 20%, (from a total of 10 tons per firm to a total of 8 tons per firm), the cheapest way to meet this requirement for the whole industry would cost ___ per day.

- \$200
- \$225
- \$375
- \$250

32. The price of corn in Mexico has fallen more than 70 percent since NAFTA took effect, which some attribute to an increase in the supply of corn from the U.S. to Mexico. If the incomes of corn farmers in Mexico have fallen as a result of this price decrease, the elasticity of demand for corn must be ___.

- relatively elastic
- relatively inelastic
- perfectly elastic
- relatively spastic
- unknown, since we don't know the price of corn

33. Market capitalist economic systems are characterized by ___ ownership of resources, while command socialist systems are characterized by ___ ownership of resources.

- private; private
- public; public
- private; public
- public; private