

RYERSON UNIVERSITY

ECN 104 INTRODUCTORY MICROECONOMICS

INSTRUCTOR: TSOGBADRAL GALAABAATAR

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**Instructions:**


1. Select the best answer for each multiple choice question and record the letter you have chosen on the scanner sheet. Answer all 75 questions.
2. No references (formula sheet, notes, books, etc.) are permitted.
3. Only non-programmable calculators are allowed.

STUDENT'S NAME: \_\_\_\_\_

(Please Print)

ID# \_\_\_\_\_

**Good Luck!**

1. What happens if there is a shortage of a good at the current price?
  - a. Sellers are producing more than buyers wish to buy.
  - b. The market must be in equilibrium.
  - c. The price is below the equilibrium price.
  - d. Quantity demanded equals quantity supplied.
  
2. Why do markets move toward equilibrium of supply and demand?
  - a. because of the actions of buyers and sellers
  - b. because of government regulations placed on market participants
  - c. because of increased competition among sellers
  - d. because of buyers' ability to affect market decisions
  
3. Which of the following would definitely result in a higher price in the market for Snickers?
  - a. demand increases and supply decreases
  - b. demand and supply both decrease
  - c. demand decreases and supply increases
  - d. demand and supply both increase
  
4. Suppose that the number of buyers in a market decreases and a technological advancement occurs. What would we expect to happen in the market?
  - a. The equilibrium price would increase, but the impact on the amount sold in the market would be ambiguous.
  - b. The equilibrium price would decrease, but the impact on the amount sold in the market would be ambiguous.
  - c. Equilibrium quantity would increase, but the impact on equilibrium price would be ambiguous.
  - d. Both equilibrium price and equilibrium quantity would increase.
  
5. Beef is a normal good. You observe that both the equilibrium price and quantity of beef have risen over time. Which of the following would be most consistent with this observation?
  - a. Consumers have experienced an increase in income and beef-production technology has improved.
  - b. The price of chicken has risen.
  - c. Consumer tastes have changed so as to prefer beef less than before.
  - d. The demand curve for beef must be positively sloped.

6. Market demand is given as  $Q_d = 60 - P$ . Market supply is given as  $Q_s = 3P$ . What would result if the market price were \$30?
- a shortage of 60
  - a surplus of 60
  - a surplus of 30
  - a shortage of 30
7. Suppose that a decrease in the price of X results in less of good Y sold. What are X and Y called?
- complementary goods
  - normal goods
  - inferior goods
  - substitute goods
8. If Francis receives an increase in his pay, what would we expect?
- Francis's demand for each good he purchases to remain unchanged
  - Francis's demand for normal goods to decrease
  - Francis's demand for normal goods to increase
  - Francis's demand for inferior goods to increase
9. What is the law of demand?
- When the price of a good falls, buyers respond by purchasing more.
  - When income levels increase, buyers respond by purchasing more.
  - When buyers' tastes for the good increase, they purchase more of the good.
  - When the price of a good or service rises, buyers respond by purchasing more.
10. What might cause a movement along the supply curve?
- a change in technology
  - a change in input prices
  - a change in expectations about future prices
  - a change in the price of the good or service
11. Which of the following is NOT a determinant of demand?
- tastes
  - technology
  - income
  - the price of related goods

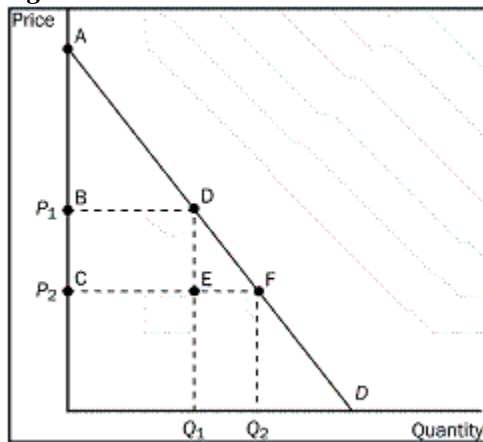
12. What does a consumer's willingness to pay measure?
- the cost of a good to the buyer
  - how much a buyer values a good
  - how much a buyer has to pay to receive a good
  - how much a seller receives from the sale of a good
13. Suppose Brock is willing to pay \$400 for a new suit, but is able to buy the suit for \$350. What is his consumer surplus?
- \$50
  - \$150
  - \$350
  - \$400
14. Suppose Lauren, Leslie, and Lydia all purchase bulletin boards for their rooms for \$15 each. Lauren's willingness to pay was \$35, Leslie's willingness to pay was \$25, and Lydia's willingness to pay was \$30. Which of the three receives the most consumer surplus from her purchase?
- Lauren
  - Leslie
  - Lydia
  - They each received the same consumer surplus since they each paid the same for the bulletin board.

**Table 1**

Buyer	Willingness to Pay
John	\$10.00
David	\$8.00
Megan	\$5.50
Ava	\$5.00
George	\$4.50

15. Refer to Table 1. If the market price is \$5.50, what is the consumer surplus in the market?
- \$3.50
  - \$4.50
  - \$7.00
  - \$12.00
16. Refer to Table 1. If the market price is \$5.25, who will purchase the good?
- All five would purchase the good.
  - Only John.
  - John, David and Megan.
  - John and David

**Figure 1**



17. Refer to Figure 1. Which area represents consumer surplus at a price of  $P_1$ ?
- a. ABD
  - b. ACF
  - c. BCDE
  - d. DEF
18. Refer to Figure 1. When the price falls from  $P_1$  to  $P_2$ , which area represents the increase in consumer surplus to existing buyers?
- a. ABD
  - b. ACF
  - c. BCED
  - d. DEF
19. Refer to Figure 1. When the price falls from  $P_1$  to  $P_2$ , which area represents the increase in consumer surplus to new buyers entering the market?
- a. ABD
  - b. ACF
  - c. BCDE
  - d. DEF
20. What is producer surplus?
- a. the area under the supply curve to the left of the amount sold
  - b. the amount a seller is paid, less the cost of production
  - c. the amount represented by the area under the supply curve
  - d. the cost to sellers of participating in a market

21. If demand decreases, what happens to the price of a product, as well as producer surplus?
- They increase.
  - They decrease.
  - They remain the same.
  - They may increase, decrease, or remain the same.
22. At the equilibrium price, which buyers will purchase the good?
- those who value the good at more than the price
  - those who value the good at less than the price
  - those who have the money to buy the good
  - those who consider the good a necessity
23. Suppose that the equilibrium price in the market for widgets is \$5. If a law increased the minimum legal price for widgets to \$6, what would happen to producer surplus?
- It would necessarily increase even if the higher price resulted in a surplus of widgets.
  - It would necessarily decrease because the higher price would create a surplus of widgets.
  - It might increase or decrease.
  - It would be unaffected.
24. Suppose that the equilibrium price in the market for widgets is \$5. If a law increased the minimum legal price for widgets to \$6, what would be the outcome?
- The resulting increase in consumer surplus would be larger than any possible loss of producer surplus.
  - The resulting increase in consumer surplus would be smaller than any possible loss of producer surplus.
  - Any possible increase in producer surplus would be larger than the loss of consumer surplus.
  - Any possible increase in producer surplus would be smaller than the loss of consumer surplus.
25. Which of the following statements about economic profit is most accurate?
- It will never exceed accounting profit.
  - It is most often equal to accounting profit.
  - It is always at least as large as accounting profit.
  - It is a less complete measure of profitability than accounting profit.

26. What does marginal cost tell us?
- the value of all resources used in a production process
  - the marginal increment to profitability when price is constant
  - the amount by which total cost rises when output is increased by one unit
  - the amount by which output rises when labour is increased by one unit
27. When marginal cost exceeds average total cost, what do we know?
- Average fixed cost must be rising.
  - Average total cost must be rising.
  - Average total cost must be falling.
  - Marginal cost must be falling.
28. Some costs do not vary with the quantity of output produced. What are those costs called?
- marginal costs
  - average costs
  - fixed costs
  - total costs
29. For a firm, what is the relationship between the quantity of inputs and quantity of output called?
- the profit function
  - the production function
  - the total-cost function
  - the quantity function
30. When do economies of scale occur?
- when long-run average total costs rise as output increases
  - when long-run average total costs fall as output increases
  - when average fixed costs are falling
  - when average fixed costs are constant

**Table 2**

<b>Measures of Cost for ABC Inc. Widget Factory</b>			
<b>Quantity of Widgets</b>	<b>Variable Costs</b>	<b>Total Costs</b>	<b>Fixed Costs</b>
0			\$10
1	\$ 1		
2	3	\$13	
3	6	16	
4	10		
5		25	
6	21		10

31. **Refer to Table 2.** What is the average fixed cost of producing five widgets?

- a. \$1.00
- b. \$2.00
- c. \$3.00
- d. \$4.00

32. **Refer to Table 2.** What is the average total cost of producing one widget?

- a. \$1.00
- b. \$10.00
- c. \$11.00
- d. \$22.00

33. **Refer to Table 2.** What is the marginal cost of producing the sixth widget?

- a. \$1.00
- b. \$3.50
- c. \$5.00
- d. \$6.00

34. What is the fundamental reason that marginal cost eventually rises as output increases?

- a. economies of scale
- b. diseconomies of scale
- c. diminishing marginal product
- d. rising average fixed cost

35. What does diminishing marginal product imply?
- The marginal cost of an extra worker is unchanged.
  - The marginal cost of an extra worker is less than the previous worker's marginal cost.
  - The marginal product of an extra worker is less than the previous worker's marginal product.
  - The marginal product of an extra worker is greater than the previous worker's marginal product.
36. Which of the following is correct?
- Diminishing marginal product is a long-run property and diseconomies of scale is a short-run property.
  - Diminishing marginal product is a short-run property and diseconomies of scale is a long-run property.
  - Both diminishing marginal product and diseconomies of scale are short-run properties.
  - Both diminishing marginal product and diseconomies of scale are long-run properties.
37. What do we know about a competitive market?
- No single buyer or seller can influence the price of the product.
  - There is a small number of sellers.
  - The goods offered by the different sellers are markedly different.
  - Entry into the market is difficult.
38. For a firm in a perfectly competitive market, the price of the good is always which of the following?
- equal to marginal revenue
  - equal to total revenue
  - greater than average revenue
  - less than average revenue
39. When will a profit-maximizing firm in a competitive market always make marginal adjustments to production?
- as long as average revenue is greater than average total cost
  - as long as average revenue is equal to marginal cost
  - as long as marginal cost is greater than average total cost
  - as long as price is above or below marginal cost

**Table 3**

Quantity	Total Revenue	Total Cost
0	\$0	\$4
1	20	14
2	40	26
3	60	40
4	80	56
5	100	74
6	120	94
7	140	116
8	160	140
9	180	166

40. Refer to Table 3. At which quantity of output is marginal revenue equal to marginal cost?

- a. 2
- b. 3
- c. 4
- d. 6

41. Refer to Table 3. What is the maximum profit available to this firm?

- a. \$20
- b. \$24
- c. \$26
- d. \$28

42. Refer to Table 3. If the firm finds that its marginal cost is \$18, what should it do?

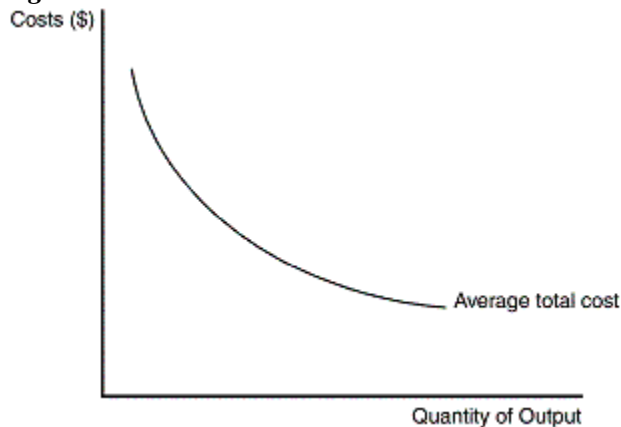
- a. It should increase production to maximize profit.
- b. It should increase the price of the product to maximize profit.
- c. It should increase the marginal revenue of the product to maximize profit.
- d. It should decrease production to maximize profit.

43. In a competitive market, a firm's short-run supply curve is part of which of the following curves?

- a. marginal revenue
- b. average variable cost
- c. average total cost
- d. marginal cost

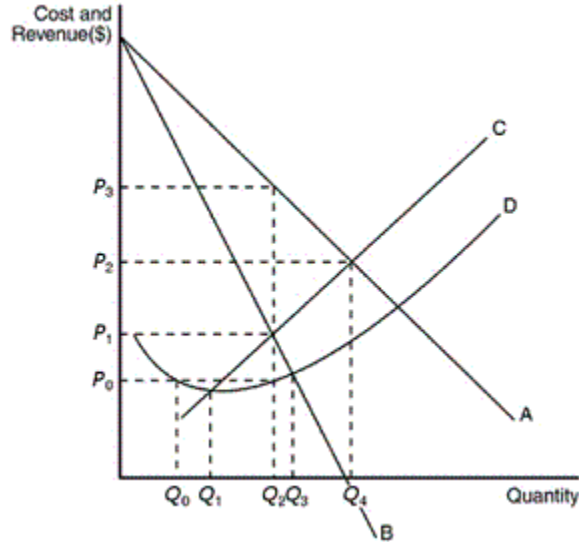
44. In the long run, when will a profit-maximizing firm choose to exit a market?
- when average fixed cost is falling
  - when variable costs exceed sunk costs
  - when marginal cost exceeds marginal revenue at the current level of production
  - when total revenue is less than total cost
45. A firm's marginal cost has a minimum value of \$2; its average variable cost has a minimum value of \$4; and its average total cost has a minimum value of \$5. At what product price will the firm shut down?
- below \$2
  - below \$4
  - below \$5
  - below \$1
46. In a market that allows free entry and exit, when does the process of entry and exit end for the typical firm in the market?
- when economic profit is zero
  - when total revenue is equal to average total cost
  - when average revenue exceeds marginal cost
  - when accounting profit is zero
47. Market demand is given as  $Q^D = 120 - P$ . Market supply is given as  $Q^S = 4P$ . Each identical firm has  $MC = 6Q$  and  $ATC = 3Q$ . What quantity of output will a typical firm produce in this competitive market?
- 4
  - 6
  - 16
  - 24
48. If at the  $MC = MR$  output,  $AVC$  exceeds price:
- new firms will enter this industry.
  - the firm should shut down in the short run
  - the firm should produce the  $MC = MR$  output and realize an economic profit.
  - the firm should expand its plant.

**Figure 2**



49. **Refer to Figure 2.** The shape of the average total cost curve reveals information about the nature of the barrier to entry that might exist in a monopoly market. Which of the following monopoly types best coincides with the figure?
- ownership of a key resource by a single firm
  - a natural monopoly
  - a government-created monopoly
  - a dynamic monopoly
50. **Refer to Figure 2.** In view of what is known about the relationship between average total cost and marginal cost, what do we know about the marginal cost curve for this firm?
- It must lie entirely above the average total cost curve.
  - It must lie entirely below the average total cost curve.
  - It must be upward sloping.
  - It does not exist.
51. If a profit-maximizing monopolist faces a downward-sloping market demand curve, what do we know?
- Its average revenue is less than the price of the product.
  - Its average revenue is greater than the price of the product.
  - Its average revenue is less than marginal revenue.
  - Its marginal revenue is less than the price of the product.
52. Marginal revenue can become negative for which of the following firms?
- both competitive and monopoly firms
  - competitive firms, but not monopoly firms
  - monopoly firms, but not competitive firms
  - neither competitive nor monopoly firms

**Figure 3**



53. Refer to Figure 3. What is a profit-maximizing monopoly's total revenue?

- a.  $P_2 \times Q_4$
- b.  $P_3 \times Q_2$
- c.  $(P_3 - P_0) \times Q_2$
- d.  $(P_3 - P_0) \times Q_4$

54. Refer to Figure 3. What is a profit-maximizing monopoly's profit?

- a.  $P_2 \times Q_4$
- b.  $P_3 \times Q_2$
- c.  $(P_3 - P_0) \times Q_2$
- d.  $(P_3 - P_0) \times Q_4$

55. In theory, perfect price discrimination results in which of the following outcomes?

- a. It decreases the monopolist's profits.
- b. It decreases consumer surplus.
- c. It increases deadweight loss.
- d. It decreases total output.

56. A monopolist faces the following demand curve:

Price	Quantity Demanded
\$8	300
7	400
6	500
5	600
4	700
3	800
2	900
1	1000

The monopolist has fixed costs of \$1000 and has a constant marginal cost of \$2 per unit. If the monopolist were able to perfectly price discriminate, how many units would it sell?

- a. 400
- b. 500
- c. 700
- d. 900

57. A monopolist faces market demand given by  $P = 120 - Q$ . For this market,  $MR = 120 - 2Q$  and  $MC = 4Q$ . What quantity of output will the monopolist produce in order to maximize profits?

- a. 20
- b. 24
- c. 80
- d. 120

58. Let  $P$  = price;  $MR$  = marginal revenue; and  $MC$  = marginal cost. For a profit-maximizing monopolist, which of the following is the correct relationship?

- a.  $P = MR = MC$
- b.  $P = MR < MC$
- c.  $P = MR > MC$
- d.  $P > MR = MC$

59. Which of the following statements represents a monopoly firm?

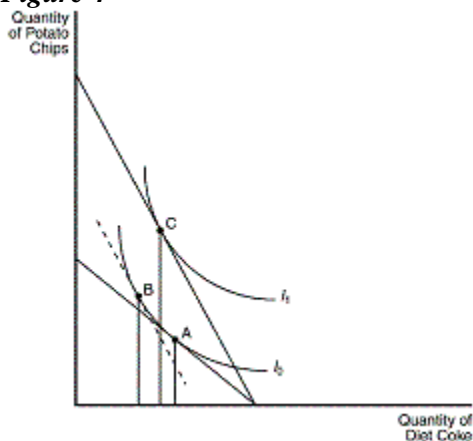
- a. A monopoly firm is a price taker and has no supply curve.
- b. A monopoly firm is a price maker and has no supply curve.
- c. A monopoly firm is a price maker and has a downward-sloping supply curve.
- d. A monopoly firm is a price maker and has an upward-sloping supply curve.

60. Consider a profit-maximizing monopoly pricing under the following conditions: The profit-maximizing price charged for goods produced is \$16. The intersection of the marginal revenue and marginal cost curves occurs where output is 10 units and marginal cost is \$8. The socially efficient level of production is 12 units. The demand curve and marginal cost curves are linear. What is the deadweight loss?
- \$4
  - \$8**
  - \$12
  - \$16
61. What does a budget constraint show?
- the prices that a consumer chooses to pay for products he consumes
  - the purchases made by consumers
  - the consumption bundles that a consumer can afford**
  - the bundles of consumption that makes a consumer equally happy
62. What determines the slope of the budget constraint?
- the relative price of commodities represented on the axes**
  - the level of income of the consumer
  - the indifference curves of a consumer
  - the preferences of a consumer
63. An increase in income will cause a shift in the budget constraint in which direction?
- outward**
  - toward the good most consumed
  - toward the good least consumed
  - inward
64. What can we say about the marginal rate of substitution?
- It is the slope of a budget constraint.
  - It is always constant.
  - It is the slope of an indifference curve.**
  - It is the point at which the budget constraint is tangent to the indifference curve.

65. What does a bowed in indifference curve reflect?
- a consumer's unwillingness to substitute one good for another
  - a consumer's desire to specialize in the consumption of one good over another
  - a consumer's decreasing willingness to give up a good that she has in abundance
  - a consumer's increasing willingness to give up a good that she has in abundance

66. When two goods are perfect complements, what types of indifference curves will they have?
- indifference curves with a positive slope
  - indifference curves that are bowed in
  - straight line indifference curves
  - indifference curves that are right angles

**Figure 4**



67. Refer to Figure 4. If the consumer is currently at point A in the figure, a movement to point B as a result of a decrease in the price of potato chips represents which effect?

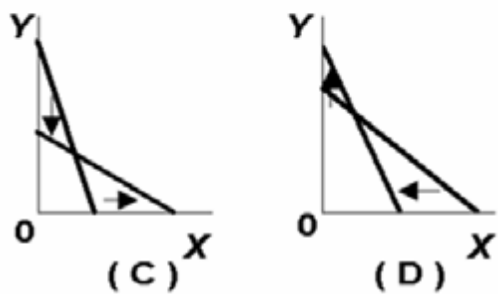
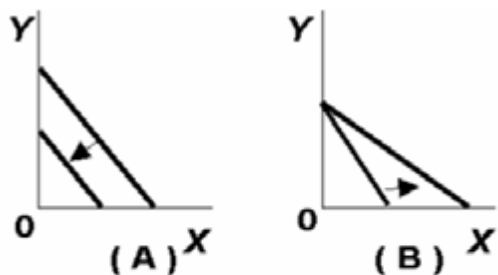
- the substitution effect
- the income effect
- the budget effect
- the price effect

68. Refer to Figure 4. A movement from point B to point C represents which effect?

- the substitution effect
- the income effect
- the budget effect
- the price effect

69. For the normal goods cola and pizza, what is a likely result of the income effect when the price of pizza falls?
- The consumer feels richer, so he buys more cola.
  - The consumer feels richer, so he buys less cola.
  - Cola becomes relatively more expensive, so the consumer buys more cola.
  - Cola becomes relatively less expensive, so the consumer buys less cola.
70. The substitution effect of an increase in the interest rate could cause an increase in which of the following?
- consumption when young and savings when young
  - consumption when old and savings when young
  - consumption when young and savings when old
  - savings when old and consumption when old
71. Given a consumer's indifference map, how may the demand curve for a good be derived?
- by moving a consumer's budget constraint as her income rises
  - by moving a consumer's budget constraint as her income rises and she makes choices
  - by moving a consumer's budget constraint as the market price changes
  - It cannot be derived from consumer theory.
72. When are violations of the law of demand assumed to occur?
- commonly
  - only when goods are Giffen goods
  - only when the substitution effect dominates the income effect
  - only when the income effect dominates the substitution effect

73. Which of the budget constraint lines illustrates a decrease in the price of good X and an increase in the price of good Y??
- Graph A
  - Graph B
  - Graph C**
  - Graph D



74. An upward-sloping individual labour supply curve is indicative of which of the following?
- dominant income effects
  - dominant substitution effects**
  - individuals that reduce work effort (hours) as income rises
  - an upward-sloping demand for leisure

75. Goods X and Y are perfect complements. If the price of good Y falls, what will the substitution effect acting by itself do?
- It will cause consumers to buy more of good Y and less of good X.
  - It will cause consumers to buy more of good X and less of good Y.
  - It will not affect the amount of goods X and Y that consumers buy.**
  - It will affect the amount of goods X and Y that consumers buy, but in an unpredictable way.

1	C	26	C	51	D
2	A	27	B	52	C
3	A	28	C	53	B
4	B	29	B	54	C
5	B	30	B	55	B
6	B	31	B	56	D
7	D	32	C	57	A
8	C	33	D	58	D
9	A	34	C	59	B
10	D	35	C	60	B
11	B	36	B	61	C
12	B	37	A	62	A
13	A	38	A	63	A
14	A	39	D	64	C
15	C	40	D	65	D
16	C	41	C	66	D
17	A	42	A	67	A
18	C	43	D	68	B
19	D	44	D	69	A
20	B	45	B	70	B
21	B	46	A	71	C
22	A	47	A	72	B
23	C	48	B	73	C
24	D	49	B	74	B
25	A	50	B	75	C