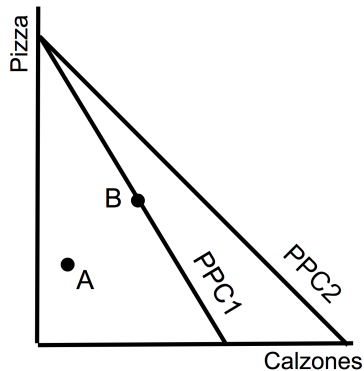


**Microeconomics Practice
Exam #3**



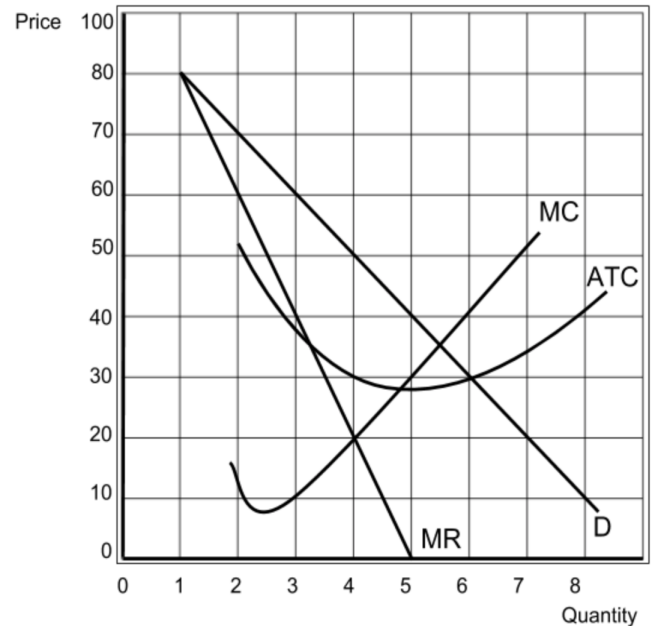
- 1 Giovanni's Pizzeria is subject to the production possibilities curve shown above. All of the following statements are true about Giovanni's Pizzeria EXCEPT
- (A) If Giovanni becomes more efficient he will move from point A to point B.
 - (B) The opportunity cost for making calzones is constant.
 - (C) If Giovanni goes from using all of his resources efficiently to not being efficient he would move from point B to point A.
 - (D) If Giovanni is producing at point B and decides to produce more calzones, his production possibilities will shift from PPC_1 to PPC_2 .
 - (E) A shift from PPC_1 to PPC_2 could be explained by a technology advancement in making calzones
- 2 If the market for rental housing is currently in equilibrium and a binding price ceiling is imposed, what is the most likely impact on price, quantity demand (Q_D) and quantity supplied (Q_S)?

Price	Q_D	Q_S
(A) Increase	Decrease	Increase
(B) Increase	Increase	Decrease
(C) Decrease	Decrease	Decrease
(D) Decrease	Increase	Decrease
(E) Decrease	Decrease	Increase

- 3 Assume the market for chocolate bars is perfectly competitive and that cocoa is a key ingredient in producing chocolate bars. If the price of cocoa increases, how will the chocolate bar market be affected?
- (A) Supply will shift rightward, decreasing the equilibrium price and increasing the equilibrium quantity of chocolate bars
 - (B) Demand will shift rightward, increasing the equilibrium price and quantity of chocolate bars
 - (C) Supply will shift leftward, increasing the equilibrium price and decreasing the equilibrium quantity of chocolate bars
 - (D) Neither supply or demand will change in the chocolate bar market
 - (E) Demand will shift leftward, decreasing the equilibrium price and quantity of chocolate bars
- 4 When marginal utility is zero, total utility will be
- (A) at its maximum
 - (B) decreasing at an increasing rate
 - (C) decreasing at a decreasing rate
 - (D) increasing at an increasing rate
 - (E) increasing at a decreasing rate
- 5 Which of the following is true for a profit-maximizing perfectly competitive firm making a loss?
- (A) Price equals both marginal cost and average total cost
 - (B) Price equals marginal cost, but is greater than average total cost
 - (C) Price equals average total cost, but is greater than marginal cost
 - (D) Price equals marginal cost, but is less than average total cost
 - (E) Firms will leave the industry in the short run when the price is greater than average variable cost.
- 6 In the long run, if the output of a firm increases by 40% when the amount of its input increases by 30%, the firm must be experiencing
- (A) diminishing marginal utility
 - (B) increasing returns to scale
 - (C) decreasing returns to scale
 - (D) diseconomies of scale
 - (E) constant returns to scale

Quantity of Workers	Total Product
0	0
1	20
2	42
3	65
4	85
5	100
6	110
7	112

- 7 The table above shows the total amount of toys that workers can produce in a day. Diminishing marginal returns to labor begin after hiring which worker?
- (A) 1st Worker
 (B) 2nd Worker
 (C) 3rd Worker
 (D) 4th Worker
 (E) 5th Worker
- 8 A contractor is employing labor and capital to build a new school. At the current mix of inputs, the marginal product of labor is 50 square feet per day, and the marginal product of capital is 100 square feet per day. The price of labor is \$25 per hour and the price of capital is \$20 per hour. To minimize costs, the firm should
- (A) increase labor; increase capital.
 (B) increase labor; decrease capital.
 (C) make no change to labor or capital.
 (D) decrease labor; increase capital.
 (E) decrease labor; decrease capital.
- 9 Which of the following best explains why the demand for a monopolistically competitive firm is downward sloping?
- (A) There are a large number of firms in the industry.
 (B) The products produced by different firms in the industry are identical.
 (C) It is easy for firms to enter or exit the industry.
 (D) The products produced by different firms in the industry are not identical
 (E) The firm makes no economic profit in the long run.



- 10 The single-price monopolist in the diagram above is currently maximizing profit. Which of the following is correct?
- (A) The monopoly is producing 5 units
 (B) The price for this monopoly is \$20
 (C) The total revenue is \$120
 (D) The monopolist's profit is \$80
 (E) The monopoly is allocatively efficient
- 11 Which of the following is true about the relationship between the marginal cost curve and the average total cost curve in the short run?
- (A) These curves never intersect in the short run
 (B) These curves are identical in the short run
 (C) When the marginal cost curve is below the average total cost curve the average cost curve is increasing.
 (D) When the average total cost curve is above the marginal cost curve the marginal cost curve is decreasing.
 (E) When the marginal cost curve is below the average total cost curve the average cost curve is decreasing.

- 12 If firms are earning profit in a perfectly competitive constant cost industry, which of the following is most likely to occur in the long run?
- (A) Firms will enter the market causing the quantity supplied by each individual firm will increase.
 - (B) Firms will enter the market causing the marginal revenue to decrease.
 - (C) Firms will enter the market causing the average total cost to increase.
 - (D) Firms will enter the market causing the marginal revenue to increase.
 - (E) The marginal cost for each firm will be greater than marginal revenue.

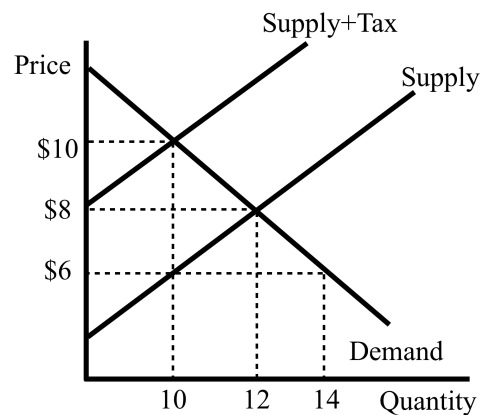
- 13 All of the following are characteristics of an oligopoly EXCEPT
- (A) Firms rarely use non-price competition.
 - (B) High barriers to entry and exit.
 - (C) Mutual interdependence.
 - (D) A few firms dominate the industry.
 - (E) Firms have significant control over price.

- 14 If the production of flu shots create a positive externality, the free market will produce
- (A) more than the socially optimal quantity of flu shots
 - (B) less than the socially optimal quantity of flu shots
 - (C) the socially optimal quantity of flu shots
 - (D) a surplus of flu shots unless they are subsidized by the government
 - (E) a shortage of flu shots unless they are taxes by the government

- 15 Assume that the government decides to regulate a profit maximizing natural monopoly. Which option below will most likely reduce deadweight loss and prevent the government from having to provide a subsidy?
- (A) A price ceiling where price equals average variable cost.
 - (B) A price ceiling where price equals minimum average total cost.
 - (C) A price ceiling where price equals average total cost.
 - (D) A price ceiling where price equals marginal cost.
 - (E) A per unit tax.

- 16 A country's production possibilities curve will most likely shift outward (to the right) if there is
- (A) a decrease in unemployment.
 - (B) a natural disaster.
 - (C) an increase in unemployment.
 - (D) an increase in the demand for consumer goods.
 - (E) a technological advancement in production.
- 17 The ABC Toy Company produces toy cars and blocks. If resources are fully employed and the firm installs a new technology that allows only toy cars to be produced more quickly, which of the following would best describe the impact of this technology?

Opportunity Cost of Cars	Opportunity Cost of Blocks
(A) Decrease	Increase
(B) Decrease	Decrease
(C) Decrease	No change
(D) Increase	Increase
(E) Increase	Decrease



- 18 In the market above is subject to a per unit tax. Which of the following represents the net price sellers receive and the total tax revenue collected by the government after the tax is imposed?

Net Price For Sellers	Total Tax Revenue
(A) \$10	\$40
(B) \$10	\$20
(C) \$8	\$40
(D) \$6	\$20
(E) \$6	\$40

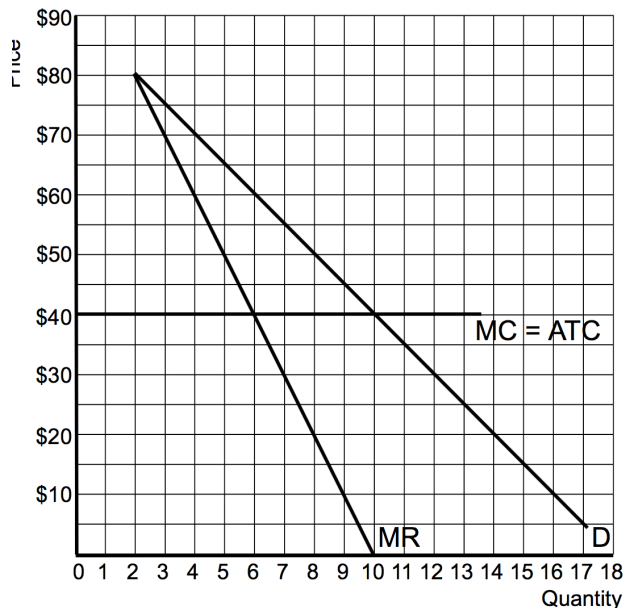
- 19 Which of the following would cause the supply curve for orange juice to shift to the left?
- (A) A decrease in the price of orange juice.
 - (B) An increase in the price of orange juice.
 - (C) A technology improvement in the production of orange juice.
 - (D) Freezing temperatures destroy orange crops.
 - (E) A decrease in the wages of orange pickers.
- 20 A perfectly competitive firm will be productively efficient if it produces a quantity where
- (A) marginal revenue equal marginal cost.
 - (B) the difference between total revenue and total cost is maximized.
 - (C) price equals marginal cost.
 - (D) price equals average total cost.
 - (E) price equals the minimum of average total cost.

Daily Output	Total Variable Cost
0	\$0
5	\$40
10	\$70
15	\$90
20	\$140
25	\$200

- 21 Based on the table above, this perfectly competitive firm will shut down if price falls below
- (A) \$6
 - (B) \$7
 - (C) \$8
 - (D) \$9
 - (E) \$10

- 22 Max recently opened a T-shirt printing company. He rents factory space for \$45,000, hires one office manager at a salary of \$35,000, and pays a total of \$25,000 in production expenses. Prior to starting this business he paid a total of \$20,000 on tuition to earn his business degree. His best alternative would be working for a local printing company earning a salary and benefits worth \$60,000 per year. Assuming he incurs no other costs, how much total revenue must Max's company receive to earn zero economic profit?
- (A) \$45,000
 - (B) \$105,000
 - (C) \$125,000
 - (D) \$165,000
 - (E) \$185,000
- 23 A local pizzeria makes 350 pizzas per week and sells each pizza for \$10. If weekly explicit costs are \$1,500 and weekly implicit costs \$800, the firm's weekly accounting profit is
- (A) \$0
 - (B) \$700
 - (C) \$1,200
 - (D) \$2,000
 - (E) \$2,300
- 24 For a perfectly competitive firm producing the profit-maximizing quantity, the average total cost is \$15 and the average variable cost is \$6. If the market price for its product is \$5, which of the following is true for the firm?
- (A) It is earning a short run loss and should shut down.
 - (B) It is earning a short run profit and should continue to operate in the short run.
 - (C) It is earning a short run loss but will continue to operate in the short run.
 - (D) It is earning a positive accounting profit.
 - (E) It is earning zero economic profit and will shut down in the short run.

Questions 25 and 26 refer to the monopoly graph below.



Quantity of Labor	Total Output (Bricks per hour)
0	0
1	10
2	16
3	19
4	21
5	22

- 25 If this single-price monopolist is unregulated, at what price and output will maximize profit?
 (A) \$60 and 6 units
 (B) \$40 and 6 units
 (C) \$60 and 10 units
 (D) \$40 and 10 units
 (E) \$80 and 2 units
- 26 If this single-price monopolist was subject to a \$20 per-unit subsidy what price and output will maximize profit?
 (A) \$20 and 8 units
 (B) \$20 and 6 units
 (C) \$50 and 8 units
 (D) \$40 and 10 Units
 (E) \$60 and 6 units
- 27 What would be the most likely result in the labor market for waitresses and waiters if the local city government requires extensive training to get a license to serve food?
 (A) The demand curve will shift right and equilibrium wage increases
 (B) The demand curve will shift left and equilibrium wage decreases
 (C) The supply curve will shift left and equilibrium wage increases
 (D) The supply curve will shift right and equilibrium wage decreases
 (E) Quantity demanded for waitresses will increase
- 28 The Red Brick Company operates in a perfectly competitive product market and hires workers in a perfectly competitive labor market. The table above shows the number of bricks produced per hour. If each brick sells for \$20 and the hourly wage is \$30, how many workers should the Red Brick Company hire?
 (A) 1
 (B) 2
 (C) 3
 (D) 4
 (E) 5
- 29 The main purpose of antitrust laws is to
 (A) protect households from false advertising and unfair business practices.
 (B) protect domestic production against foreign competition.
 (C) promote competition by preventing firms from gaining too much market share.
 (D) increase tax revenue.
 (E) ensure essential businesses earn at least a normal profit in the long run.
- 30 Which of the following best exemplifies economists' definition of public good?
 (A) Transfer payments that redistribute income.
 (B) Products that are completely funded by the government.
 (C) Products that is non-excludable.
 (D) Products that are non-excludable and have shared consumption.
 (E) Government funded services that improve economic and social well-being.

	Ketchup	Mustard
Bob	24 bottles	3 bottles
Tom	12 bottles	4 bottles

- 31 The table above shows the maximum number of ketchup and mustard bottles that Bob and Tom can produce in their factories in a single day. Which of the following is true?
 (A) Bob has a comparative advantage in both ketchup and mustard.
 (B) Tom has a comparative advantage in ketchup, while Bob has a comparative advantage in mustard.
 (C) Trading 3 bottles of ketchup for 1 bottle of mustard would be mutually beneficial for both Bob and Tom.
 (D) Trading 5 bottles of ketchup for 1 bottle of mustard would be mutually beneficial for both Bob and Tom.
 (E) There are no terms for trade that would be mutually beneficial for both Bob and Tom.
- 32 Command economies are often characterized by all of the following EXCEPT
 (A) central planning by government bureaucrats.
 (B) relatively low unemployment.
 (C) abundance of state owned enterprises.
 (D) limitations on entrepreneurship.
 (E) allocative efficiency.
- 33 This question is not part of the exam. Please skip it. Why shouldn't you post this exam or any of Mr. Clifford's resources online?
 (A) It limits Clifford's ability to make new stuff.
 (B) Clifford helped you so you should help him.
 (C) It is essentially the same thing as stealing.
 (D) Free riders limit innovation.
 (E) All of the above.
- 33 Assuming the cross price elasticity of demand between ketchup and mayonnaise is 5 and the cross price elasticity of demand between ketchup and sauerkraut is 0.5, which of the following statements is true?
 (A) Ketchup and mayonnaise are complements, while ketchup and sauerkraut are substitutes
 (B) Ketchup and mayonnaise are substitutes while ketchup and sauerkraut are complements
 (C) Ketchup is a substitute for both mayonnaise and sauerkraut
 (D) Ketchup is a complement to both mayonnaise and sauerkraut
 (E) Ketchup is a complementary good to mayonnaise while ketchup and sauerkraut are unrelated
- 34 Assume a Ford Fusion has an income elasticity of -1.5 . A decrease in consumer income will cause
 (A) the supply curve to shift right
 (B) the supply curve to shift left
 (C) the demand curve to shift left
 (D) the demand curve to shift right
 (E) a decrease in quantity demanded
- 35 Which of the following will cause the demand curve for peaches to shift right?
 (A) The price of a substitute good decreases.
 (B) The demand for peach ice cream decreases.
 (C) The price of a complementary good decreases.
 (D) The cost of fertilizer used grow peaches increases.
 (E) Scientists announce that eating peaches causes acne.
- 36 A lump sum tax imposed on a perfectly competitive firm would cause which of the following to occur?
 (A) An increase in the marginal cost.
 (B) A decrease in the marginal cost.
 (C) A decrease in the average total cost.
 (D) No change in the average total cost.
 (E) An increase in the fixed costs.

- 37 If a monopolistically competitive firm is earning short run profits, which of the following will occur in the long run?
- (A) Firms will leave the industry and the demand curve will shift right
 - (B) Firms will enter the industry and the demand curve will shift right
 - (C) Firms will enter the industry and the demand curve will shift left
 - (D) Firms will become allocatively efficient
 - (E) Each firm produce an output that minimizes average total cost
- 38 Assume that a local factory employs both robots and workers to prepare packages for shipment. The firm hires workers at a rate of \$20 a day and rents robots at a price of \$2 a day. At its current level of output, the marginal product of workers is 40 and the marginal product of robots is 10. Which of the following would be most likely result to minimize their production costs?

	Workers	Robots
(A)	hire more	hire more
(B)	hire less	hire less
(C)	hire more	hire less
(D)	hire less	hire more
(E)	no change	no change

		Firm B	
		High	Low
Firm A	High	\$500, \$400	\$500, \$500
	Low	\$300, \$800	\$400, \$600

- 39 Firm A and Firm B are the only two firms in the smartphone industry. Each can decide to price their service high or price low. In the payoff matrix above, the entry on the left in each cell is Firm A's profit and the entry on the right is Firm B's profit. Which of the following is necessarily true?
- (A) Firm A's dominant strategy is to price low.
 - (B) Firm B's dominant strategy is to price high.
 - (C) Firm A doesn't have a dominant strategy.
 - (D) Firm B doesn't have a dominant strategy.
 - (E) Firm A and Firm B should collude.

- 40 Which of the following is clearly NOT an example of price discrimination?
- (A) An airline charging a higher ticket price for tickets purchased closer to departure.
 - (B) A local movie theater charges different prices for adults and children.
 - (C) A local high school offers a discount on tickets purchased before the football game versus at the game.
 - (D) A college charging out of state students a higher price for tuition than in state students.
 - (E) A resort hotel charging a higher price for rooms with a view of the beach.
- 41 Keller Industries is a firm that is currently operating in a perfectly competitive product and resource market and is currently in long-run equilibrium. Keller Industries has a total revenue of \$3000, a marginal cost of \$6, and an average variable cost of \$2. Keller Industries output and total fixed cost must be which of the following?

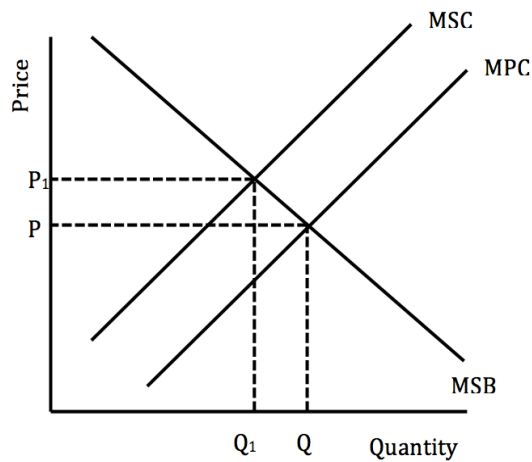
Output	Fixed Cost
(A) 300	1000
(B) 250	1500
(C) 500	2000
(D) 500	1000
(E) 300	2000

Sally's Bakery

Quantity of Labor	Total Product
0	0
1	3
2	10
3	16
4	21
5	25
6	28

- 42 Sally owns a bakery that operates in a perfectly competitive market and she can hire her workers in a perfectly competitive resource market. Sally sells each of her cakes for \$10 and must pay each of her workers a wage of \$45 per day. How many workers will she hire to maximize profit?
- (A) 2 workers
 - (B) 3 workers
 - (C) 4 workers
 - (D) 5 workers
 - (E) 6 workers

- 43 John is currently maximizing his utility while consuming burgers and hot dogs. The marginal utility of the last burger consumed is 20 and the marginal utility of the last hot dog is 4. The price of burgers is \$5. Which of the following is necessarily true?
- (A) John should buy fewer burgers.
 (B) The price of a hot dog is \$1.
 (C) John should buy more hot dogs.
 (D) The price of hot dogs is more than the price of burgers.
 (E) John will get more total utility if he buys two more burgers and four more hot dogs.

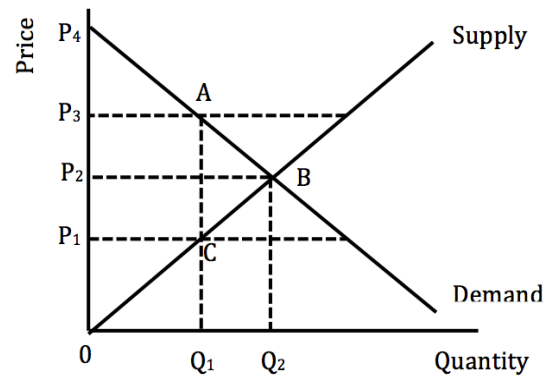


- 44 Based on the graph above, if there is not government intervention, the firms in this industry will
- (A) charge more than the socially optimal price.
 (B) charge P_1 in order to maximize profits.
 (C) decrease production to achieve allocative efficiency.
 (D) produce more output than is socially optimal.
 (E) produce less output than is socially optimal.

- 45 Which of the following is most likely to be considered a regressive tax?
- (A) Personal income tax
 (B) Sales tax
 (C) Investment income tax
 (D) Estate tax
 (E) Gift tax

- 46 The countries of Gamma and Kappa produce hats and bicycles. Gamma takes two hours to make a hat and six hours to make a bicycle, while Kappa takes three hours to make a hat and fifteen hours to make a bicycle. Which of the following statements is true?
- (A) Gamma has an absolute advantage in making bicycles and a comparative advantage in making hats.
 (B) Kappa has both an absolute advantage and a comparative advantage in making bicycles.
 (C) Gamma has a comparative advantage in making both hats and bicycles.
 (D) Gamma has a comparative advantage in making hats and Kappa has a comparative advantage in making bicycles.
 (E) Gamma has a comparative advantage in making bicycles and Kappa has a comparative advantage in making hats.

- 47 In which of the following cases would total revenue decrease?
- (A) Price increases and demand is elastic.
 (B) Price increases and demand is inelastic.
 (C) Price increases and demand is unit elastic.
 (D) Price increases and supply is inelastic.
 (E) Price increases and supply is elastic.



- 48 In the diagram above, if there is a price floor set at P_3 , producer surplus will be represented by the area
- (A) ABC
 (B) P_4AP_3
 (C) P_3AC0
 (D) P_3AB0
 (E) P_2B0

- 49 Which of the following best describes producer surplus?
- (A) When the price of good increases, producers increase the quantity supplied.
 - (B) When the price of good decreases, producers decrease the quantity supplied.
 - (C) Some consumers are willing to pay more for a product than the market price.
 - (D) Producers are unwilling to sell units below a specific price.
 - (E) Producers are able to sell product for more than their costs of production.

Quantity of Output	Total Variable Cost
0	\$0
1	\$50
2	\$60
3	\$75
4	\$100

- 50 Jane spends all of her budget on pizza and shakes. Pizzas cost \$2 a slice and shakes are a \$1 each. If Jane's marginal utility for the last slice of pizza was 50 utils and the marginal utility for the last shake was 10 utils, to maximize her utility Jane should
- (A) maintain her current combination of pizzas and shakes.
 - (B) purchase fewer slices of pizza and more shakes.
 - (C) purchase more slices of pizza and more shakes.
 - (D) purchase more slices of pizza and less shakes.
 - (E) purchase less slices of pizza and less shakes.

- 51 A firm is producing 250 units of output at a total cost of \$1000. The firm's average fixed cost is \$1 per unit. What is the firm's total variable cost?
- (A) \$3
 - (B) \$1
 - (C) \$250
 - (D) \$500
 - (E) \$750

- 52 A profit-maximizing firm will continue to operate in the short run as long as
- (A) price is greater than average total cost.
 - (B) price is greater than or equal to average variable cost.
 - (C) marginal cost is equal to marginal revenue.
 - (D) they can cover all of their fixed costs.
 - (E) they are allocatively efficient.

- 53 The table above provides the total variable cost for a firm. If the fixed cost is \$60, what is the marginal cost and the average total cost of the 3rd unit?

	<u>Marginal Cost</u>	<u>Average Total Cost</u>
(A)	\$15	\$45
(B)	\$15	\$25
(C)	\$15	\$135
(D)	\$10	\$25
(E)	\$10	\$45

Hershey Chocolate

		Don't Advertise	Advertise
Nestle Chocolate	Don't Advertise	15, 15	10, 20
	Advertise	20, 10	12, 12

- 54 Both the Hershey Chocolate Company and Nestle Chocolate Company have to make a choice about whether to advertise their newest candy bar. The payoff matrix above shows what each firm's daily profit will be. The first entry in each cell shows the profit for Nestle, and the second entry in each cell shows the profit for Hershey. A Nash equilibrium results under which of the following conditions?
- (A) When firms both advertise
 - (B) When Hershey advertises, and Nestle does not advertise
 - (C) When Nestle advertises, and Hershey does not advertise
 - (D) When both do not advertise
 - (E) There are two different outcomes that are both considered to be a Nash equilibrium

- 55 Assume that the demand for hot chocolate is relatively inelastic and the supply is relatively elastic. Which of the following will occur if the government imposes a per unit tax on hot chocolate?
- (A) The tax burden will fall more on the producers.
 (B) The tax burden will fall more on the consumers.
 (C) The tax burden will be shared equally between the consumers and producers
 (D) The net revenue collected by firms will increase.
 (E) The decrease in price will increase the quantity demanded.
- 56 Which of the following best describes what will happen to the price and quantity of oranges if a hurricane damages crops at the same time that the price of apples, a substitute to oranges, rises?
- | <u>Price</u> | <u>Quantity</u> |
|-------------------|-----------------|
| (A) Increase | Increase |
| (B) Decrease | Indeterminate |
| (C) Increase | Decrease |
| (D) Indeterminate | Increase |
| (E) Increase | Indeterminate |
- 57 The local peanut farm is currently operating in both a labor market and product market that are perfectly competitive. The last worker hired by the farm has a marginal product of 10 units per hour and is paid \$30 per hour. The price of a bag of peanuts is \$6. Based on this information which of the following should the peanut farm do?
- (A) Decrease the product price
 (B) Increase the product price
 (C) Employ more workers
 (D) Employ less workers
 (E) Decrease wages
- 58 Firm X is currently a monopsony. All of the following statements are true for Firm X EXCEPT
- (A) Firm X maximizes profit when the marginal revenue product of the last workers is equal to the marginal factor cost of that worker.
 (B) The supply of labor is upward sloping.
 (C) The marginal resource cost of each worker is equal to the wage.
 (D) Each additional worker eventually generates less additional revenue.
 (E) The demand for each worker is greater than the marginal revenue that each additional worker generates.

Francisco's Art Studio

Number of Artists	Total Number of Mud Statues
1	10
2	25
3	35
4	43
5	48

- 59 The table above shows the short-run output for Francisco's Art Studio. If the price of each mud statue is \$12, what is the marginal revenue product of the fifth worker hired?
- (A) \$5
 (B) \$60
 (C) \$96
 (D) \$576
 (E) \$12
- 60 Assume the market for product X experiences a positive externality. Which of the following statements is most likely true?
- (A) If unregulated the market will produce the socially optimal quantity.
 (B) At the socially optimal quantity the marginal social benefit is greater than the marginal social cost.
 (C) The free market will overproduce good X.
 (D) A per unit subsidy will decrease deadweight loss.
 (E) Firms will voluntarily adjust production to achieve allocative efficiency.