ECON 102 - Principles of Microeconomics
Professor Elliott Parker
Second Exam
April 2, 2008

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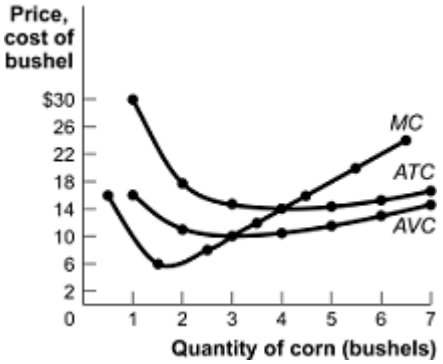
N A M E

1. Consider two possible cookie economies. In Economy A, Professor Parker has two cookies, and 50 students also have two cookies each. In Economy B, Professor Parker has a hundred cookies, and 50 students only have one cookie each. Which of the following statements about efficiency is true?

A) Economy A is more efficient than Economy B because the distribution of cookies is more equal.
B) Economy A and B are both efficient, since you can't make the students better off without making Professor Parker worse off.
C) Economy B is more efficient than Economy A, because you can't make Professor Parker better off without making the students worse off.
D) Economy B is more efficient than Economy A, because Professor Parker would have enough extra cookies to compensate the 50 students for their lost cookie if he wanted to (even though he doesn't want to).

Use this figure for questions 2-4:



2. The market for corn is perfectly competitive, and an individual corn farmer faces the cost curves shown in the above figure. If the price of a bushel of corn in the market is $14, then the farmer will produce _____ of corn and earn an economic _____ equal to _____.

A) 4 bushels; profit; $0.
B) 4 bushels; profit; just less than $80 per bushel
C) 2 bushels; profit; $0
D) 2 bushels; loss; just more than $80 per bushel

3. If the price of a bushel of corn in the market is $4, then the above farmer will produce _____ of corn and earn an economic _____ equal to _____.

A) 0 bushels; loss; average fixed costs
B) 0 bushels; loss; total fixed costs
C) 3 bushels; loss; $30 per bushel
D) none of the above

4. If the price of a bushel of corn in the market is $10, then the farmer will produce _____ of corn and earn an economic _____ equal to _____.

A) 0 bushels; loss; average fixed costs
B) 0 bushels; loss; total variable costs
C) 3 bushels; loss; total fixed costs
D) 3 bushels, loss; $30 per bushel

5. When the Reno Mattress Company produces 10 beds per day, its average variable cost is $500, its marginal cost is $600, and its average total cost is $600. When Better Beds increased production from 9 to 10 beds per day:

A) Average variable cost remained constant.
B) Average variable cost fell.
C) Average variable cost rose.
D) There is no way to know how average variable cost changed.

6. Suppose that with 50 weeks of labor, your firm can produce 2,800 units of output and with 60 units of labor the firm can produce 3,100 units of output. The marginal product of the additional labor is equal to:
A) 1/30. B) 300. C) 10. D) 35. E) 30.

7. In the long run, Harbert's Haircuts can cut 300 heads of hair per week at a total cost of $3,000, 400 heads at a total cost of $4,000, or 500 heads at a cost of $5,000. Between 400 and 500 heads of hair, Harbert's Haircuts experiences:
A) Constant returns to scale.
B) Economies of scale.
C) Diseconomies of scale.
D) A U-shaped average cost curve.
E) A U-shaped total cost curve.

8. Whenever marginal cost exceeds marginal revenue:
A) profits will increase when output is expanded by one unit.
B) profits will decline when output is expanded by one unit.
C) profits will remain constant when output is expanded by one unit.
D) profits are unaffected by changes in output.
E) total costs will exceed total revenue.

9. Which of the following is most likely to be a fixed cost?
A) electricity payments
B) postage
C) office supplies
D) wage payments
E) property taxes

10. If profits are positive in the short run in a perfectly competitive industry, which of the following would you NOT expect to happen as the market moves to the long run?
A) Profits of each firm will fall.
B) Firms will enter the industry.
C) The market price will fall.
D) Total market output will fall.
E) Each firm will decrease output.

11. For most firms:
A) total fixed costs decline as output is expanded.
B) marginal cost declines throughout the relevant range of output.
C) average total costs decline up to some level of output and then begin to increase.
D) average total costs increase up to some level of output and then begin to decline.

12. If average total cost is declining, marginal cost cannot be increasing.
A) True B) False

13. When diminishing returns exist, then the marginal cost curve is upward sloping.
A) True B) False

14. The advantage of specialization in production is one of the primary reasons that a firm experiences decreasing returns to scale.
A) True B) False

15. The market for new drugs is not usually perfectly competitive since the companies manufacturing these drugs are usually granted patents, and this restricts entry into the industry.
A) True B) False

16. In the short run, the fixed costs of running a farm should play no role in determining the level of production.
A) True B) False

17. Suppose the beef industry is perfectly competitive and the demand for beef rises. Then, as long as the demand does not subsequently fall, beef producers can expect to earn economic profits in both the short run and the long run.
A) True B) False

18. When the accountant fails to take opportunity costs into consideration, the result is that:
A) reported profits will be understated relative to actual economic profits.
B) economic profits will exceed accounting profits.
C) economic profits will be overstated relative to actual accounting profits.
D) reported profits will be overstated relative to actual economic profits.
E) economic profits will be understated relative to actual profits.

19. Joni drives a big yellow taxi in Seattle, where she can charge a price of $1.70 per mile. She is willing to work 8 hours a day. During an 8-hour day, she will receive payment for driving a total of 200 miles. Her cost of operating the taxi is $0.30 per mile in gas, $0.40 per mile in general maintenance, and $20 in insurance each day. Joni has the option of working at a classic record store for 8 hours a day earning $10.00 per hour. Other people working at the record store would like to be able to drive a cab, but the city government will not give out any more licenses for cab drivers, and Joni has no other employment options. What is her daily economic profit from driving a taxicab?
A) $0 B) 80 C) 100 D) 180 E) 340

20. The measure of how much of one good an individual is willing to give up in return for one more unit of another good is the:
A) marginal utility of that good.
B) marginal rate of substitution.
C) income elasticity.
D) price elasticity.

21. If the income that Neil has to spend changes but prices for goods remain the same:
A) The position of his budget line changes but the slope remains the same.
B) The slope of his budget line changes but the intercept on the horizontal axis remains the same.
C) The slope of his budget line changes but the intercept on the vertical axis remains the same.
D) Neither the slope of his budget line nor its position changes.

22. If Dorothy's income stays the same and the price of the good on the vertical axis stays the same, but the price of the good on the horizontal axis changes, then:
A) The position of her budget line changes, but the slope remains the same.
B) The slope of her budget line changes, but the intercept on the horizontal axis remains the same.
C) The slope of her budget line changes, but the intercept on the vertical axis remains the same.
D) Neither the slope nor the position of her budget line changes.

23. If a good is a normal good and the price increases:
A) the income and substitution effects each provide an incentive for the consumer to purchase more of the good.
B) the income and substitution effects each provide and incentive for the consumer to purchase less of the good.
C) the income effect will be positive and the substitution effect will be negative.
D) the income effect will be negative and the substitution effect will be positive.
E) the income and substitution effects will cancel each other out and leave the demand for the good unchanged.

24. The utility associated with the consumption of the next apple is 300 utils, while the consumption of the next orange produces a gain of 400 utils. The price per apple is $0.30, while the price per orange is $0.50. A consumer will maximize utility:
A) if equal quantities of apples and oranges are consumed.
B) if less is spent on apples and more on oranges until marginal utilities per dollar for each good are equal.
C) if only apples are consumed.
D) if more is spent on apples and less on oranges until marginal utilities per dollar for each good are equal.

25. As an individual moves down his or her indifference curve, total utility remains constant.
A) True B) False

26. The following bundles can all be on the same indifference curve. Bundle A: 4 enchiladas, 1 burrito; Bundle B: 3 enchiladas, 3 burritos; Bundle C: 2 enchiladas, 2 burritos.
A) True B) False

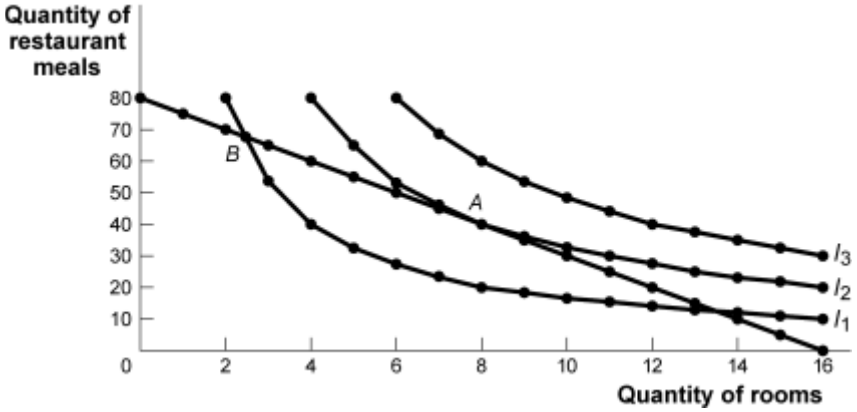
27. At the video store, Lucian narrows his selection to either a $2 videocassette of *The Evil Dead* or a $4 DVD of *Finding Nemo*. Lucian finally flips a coin to decide which movie to rent. This must mean that Lucian's marginal rate of substitution of *The Evil Dead* for *Finding Nemo* is ½.
A) True B) False

28. If Elvis's indifference curve between guitars and Cadillacs is shaped like a right angle, then he considers the two goods perfect complements.
A) True B) False

29. Assume that perfect competition exists in output and factor markets. The P = MC rule for profit maximization will imply the same level of labor use that would be implied by using the VMPL = W rule.
A) True B) False

30. A profit-maximizing producer employs each factor of production up to the point at which the value of the marginal product of the last unit of the factor employed is equal to the price per unit of output.
A) True B) False

Use this figure for questions 31-32:



31. In the above figure, which of the following events could lead to an optimal consumption bundle on indifference curve I_1?
A) an increase in income
B) an increase in the price of restaurant meals
C) a decrease in the price of rooms
D) all of the above

32. In the above figure, which of these could lead to an optimal consumption bundle on indifference curve I_3?
A) a decrease in income
B) an increase in the price of restaurant meals
C) a decrease in the price of rooms
D) none of the above

33. Suppose the government decides to give a large tax refund to all taxpayers, especially those with children, but the tax refund does not depend on how many hours you worked. If leisure is a normal good, how would this tax credit affect the amount of labor supplied?
A) Since this has a fixed effect on taxes, it does not change the wage and thus does not affect labor supply.
B) We don't know what will happen to the quantity of labor supplied, since we don't know if the income effect or substitution effect will dominate.
C) Since this is a pure income effect, the amount of labor supplied will decrease.
D) Since the income and substitution effects move in the same direction, the amount of labor supplied will increase.

34. A backward-sloping labor supply curve is a result of:
A) the income effect dominating the substitution effect.
B) the substitution effect dominating the income effect.
C) the substitution effect complementing the income effect.
D) the income effect exactly offsetting the substitution effect.

35. In the case of savings, the income and substitution effects:
A) work in the same direction.
B) work in opposite directions.
C) are each ambiguous.
D) exist, but play an insignificant role.

36. The competitive firm's demand for labor is:
A) independent of the demand for the firm's product.
B) a function of how competitive the labor market is.
C) equal to the value of the marginal product times that marginal cost of production.
D) dependent upon and derived from the demand for the firm's product.
E) the inverse of the marginal product of labor.

37. In the purple-green model discussed in class, where a larger proportion of purple workers tend to have higher amounts of unobservable human capital, which of the following is *not* a prediction of the model?
A) Employers will most likely hire only purple applicants for skilled jobs, even though some green applicants may have high levels of human capital.
B) An applicant's chances of getting a skilled position depends primarily on his or her own past investments in acquiring human capital, not his or her color.
C) Job discrimination and income differentials may continue to be a problem even if everybody is rational and nobody has any particular preference for interacting only with others like themselves.
D) Green workers will tend to not invest in acquiring human capital, since they assume employers will be biased against them.
E) Employers will be willing to hire both purple and green applicants for unskilled jobs, even though some green applicants may have high levels of human capital.

38. One reason that wage discrimination based on gender or ethnicity could continue to exist is:
A) employers find that gender or ethnicity are statistically correlated with unobservable skills, and workers in discriminated groups believe they won't be given a chance to get a skilled job.
B) the existence of higher than equilibrium wages due to market interference or market failure.
C) it is justified by the marginal productivity theory of income distribution.
D) A and B
E) A, B, and C

39. In a perfectly efficient free market economy, which is *not* true?
A) All buyers and sellers in all markets are price takers, and goods are homogeneous.
B) All buyers and sellers in all markets have perfect information about the goods and services they are buying or selling.
C) The benefits of all transactions go only to buyers, and all long-run costs are paid for by the seller or producer.
D) The distribution of income is determined by the distribution of resource ownership and the market prices for those resources, so that if ownership of higher-valued capital, labor, and other resources is unfairly distributed, income will also be unfairly distributed.
E) The net surplus value of current market goods is maximized at the expense of non-market goods such as the environment, especially in the long run.

40. Which of the following statements best captures the concept of deadweight loss?
A) "I would have consumed a lot more beer if the price had not been so high."
B) "I would have sold a lot more beer if the price had not been so low."
C) "The government will waste much of the tax revenue it collects."
D) "I would have been willing to pay more for a keg of beer than the supplier was willing to accept, but I'm not willing to pay enough to cover the tax."
E) "I shouldn't have consumed so much beer, but the price was so cheap!"

41. An efficiency wage exists when an employer pays an employee more than the equilibrium wage to motivate the employee to work hard.
A) True B) False

42. Every point on the production possibility frontier is economically efficient – that is, efficient in consumption, efficient in production, and efficient in output levels.
A) True B) False

43. When economists focus on the well-being of individuals in the economy, they primarily use the concept of:
a) efficiency.
b) productivity.
c) real wages.
d) money income.
e) profit maximization.

44. In a circular flow for a simplified economy:
A) business firms will be the final recipients of income.
B) the productive resources are owned by the household sector.
C) all resources are owned by business firms.
D) households are the primary producers of final goods and services.
E) households are on the demand side of the resource market and the supply side of the product market.

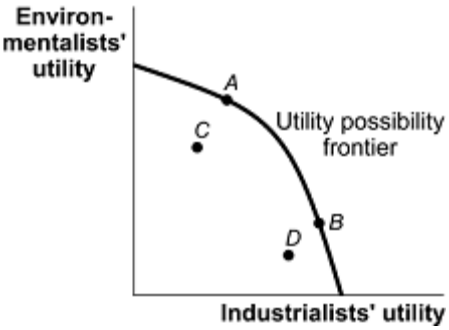
45. Which of the following is *not* a characteristic of a perfectly competitive industry?
A) Products are differentiated or heterogeneous.
B) There are many firms.
C) Firms seek to maximize profits.
D) Profits may be positive in the short run.
E) Average costs are minimized in the long run.

46. Suppose the Georgia peach market is in equilibrium. Attempts to reallocate the consumption of peaches would lead to:
A) maximization of total surplus in this market.
B) an increase in consumer and producer surplus.
C) a decrease in producer surplus and the maximization of total surplus.
D) a reduction in the total surplus.

47. Prices are economic signals; when the market price is falling:
A) it may indicate that there has been a decrease in buyers' willingness to pay.
B) it may indicate that there has been an increase in sellers' cost.
C) it may indicate that there has been an increase in buyers' willingness to pay.
D) it may indicate that many individuals will want to buy the good, putting downward pressure on the price.

48. In a competitive market economy the price of corn is $5 per bushel, the price of wheat is $3 per bushel, the marginal product of labor in corn is 7 bushels, and the marginal product of labor in wheat is 12 bushels. If there is just one labor market for both corn and wheat workers:
A) labor will move from corn to wheat, since marginal product of wheat is greater than the marginal product of corn.
B) labor will move from wheat to corn, since the price of corn is greater than the price of wheat.
C) labor need not move from corn to wheat or from wheat to corn, since both markets could be in equilibrium.
D) labor will move from corn to wheat, since the value of the marginal product is greater in wheat production than in corn production.

49. In the absence of market failure, a market equilibrium:
A) is efficient, since total surplus is maximized.
B) is equitable (or fair), since total surplus is maximized.
C) could be made more efficient by reallocating consumption to more needy consumers.
D) could be made more efficient by increasing the level of production for certain essential goods (such as oil).



50. The above figure shows the utility possibility frontier for environmentalists and industrialists. If society has to choose between A and D:

A) A will always be chosen since it is on the utility possibility frontier and is therefore efficient, while D is not efficient.
B) D could be chosen, if society places a lower weight on the utility of environmentalists than on the utility of industrialists.
C) D could be chosen, if society places a higher weight on the utility of environmentalists than on the utility of industrialists.
D) D will not be chosen since it involves lower utility for environmentalists than A.

BONUS: What are the three conditions necessary for perfect markets? What is a competitive general equilibrium? If the three conditions are met, what can be proven for any competitive general equilibrium? (Continue on the back if necessary.)