

Economics 101
Spring 2009
Professor Wallace

Economics 101 Midterm Exam #2

April 9, 2009

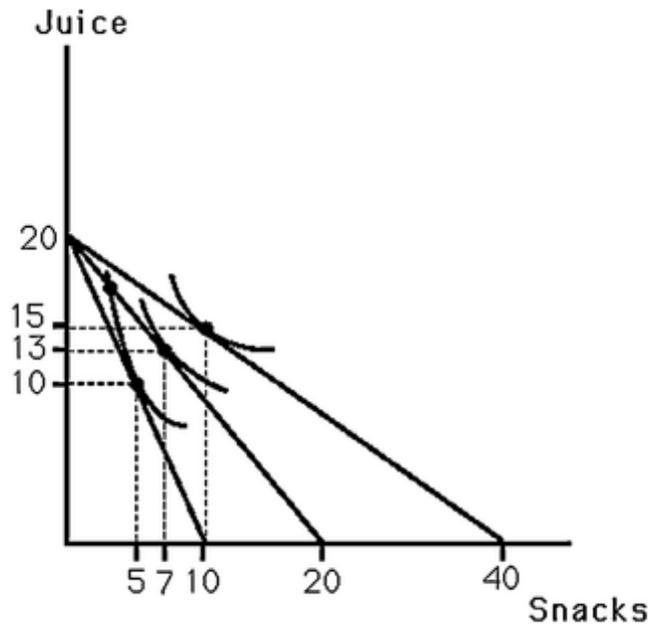
Instructions

Do not open the exam until you are instructed to begin. You will need a #2 lead pencil. If you do not have one you will need to borrow one from a classmate or one of the TAs. Before you may begin the exam everyone must take the following steps:

1. Use the #2 lead pencil to fill in your name on the answer sheet.
2. Fill in your student number on the answer sheet.
3. Fill in your TA Code in column A of the space allotted for “Special Codes” on the answer sheet.
 - If your TA is Mai Seki your TA Code is 1
 - If your TA is Caleb White your TA Code is 2.
 - If your TA is Hanquing Wang your TA Code is 3.
 - If your TA is Dai Zusai your TA code is 4.
 - If your TA is Yuya Takahashi your TA code is 5.
4. Fill in your Exam Code in column B of the space allotted for “Special Codes” on the answer sheet
 - If your exam is green then your Exam Code is 1.
 - If your exam is white then your Exam Code is 2 .

The exam consists of 35 multiple-choice questions. All questions are equally weighted and there is a single best answer for each question. The exam is scheduled to end at 12:15 pm. You are encouraged to hold onto the hard copy of your exam so that you can check your answers. An answer key for this exam will be made available sometime later this today, but the tests will not be handed back until next week. In keeping with the previously state policy, we will not except early email request for exam scores.

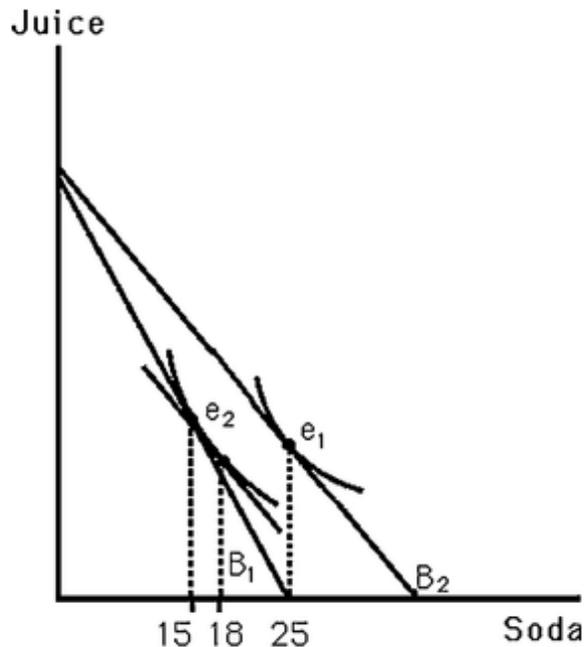
1. Johnny has allocated \$30 toward coffee and tea and feels that coffee and tea are perfect substitutes. Due to differences in caffeine levels, his MRS of tea for coffee equals 2. If coffee and tea sell for the same price, Johnny will
 - a. spend all \$30 on tea.
 - b. spend all \$30 on coffee.
 - c. spend \$20 on coffee and \$10 on tea.
 - d. be indifferent between any bundle of coffee and tea costing \$30.



2. The above figure shows Bobby's indifference map for juice and snacks. Also shown are three budget lines resulting from different prices for snacks assuming he has \$20 to spend on these goods. Which of the following points are on Bobby's demand curve for snacks?
 - a. $p = 2, q = 10$
 - b. $p = 2, q = 13$
 - c. $p = 2, q = 5$
 - d. $p = 1, q = 20$

3. If consumer income and prices increase by the same percentage,
 - a. the consumer will buy more of both goods.
 - b. the consumer will buy more of both goods if they are both normal goods.
 - c. the consumer will buy less of both goods if they are both inferior goods.
 - d. the consumer's utility maximizing bundle stays the same.

4. Suppose Lisa spends all of her money on books and coffee. When the price of coffee decreases, the
- substitution effect on coffee is positive, and the income effect on coffee is positive.
 - substitution effect on coffee is ambiguous, and the income effect on coffee is ambiguous.
 - substitution effect on coffee is positive, and the income effect on coffee is ambiguous.
 - substitution effect on coffee is ambiguous, and the income effect on coffee is positive.



5. The above figure shows Bobby's indifference map for soda and juice. B1 indicates his original budget line. B2 indicates his budget line resulting from a *decrease* in the price of soda. From the graph, one can conclude that
- Bobby views soda as an inferior good.
 - Bobby's demand for soda is perfectly inelastic.
 - Bobby views soda as a normal good.
 - the income elasticity of demand for soda is 1.
6. The above figure shows Bobby's indifference map for soda and juice. B1 indicates his original budget line. B2 indicates his budget line resulting from a *decrease* in the price of soda. From the graph, one can conclude that
- Bobby views soda and juice as substitute goods.
 - Bobby views soda and juice as complimentary goods.
 - Bobby preferences aren't rational.
 - None of the above.

7. If a person supplies fewer hours of labor in response to a wage increase, then
 - a. the substitution effect is greater than the income effect.
 - b. the income effect is greater than the substitution effect.
 - c. the income effect equals the substitution effect.
 - d. the person is not maximizing utility.

8. Efficient production occurs if a firm
 - a. cannot produce its current level of output with fewer inputs.
 - b. given the quantity of inputs, cannot produce more output.
 - c. maximizes profit.
 - d. All of the above.

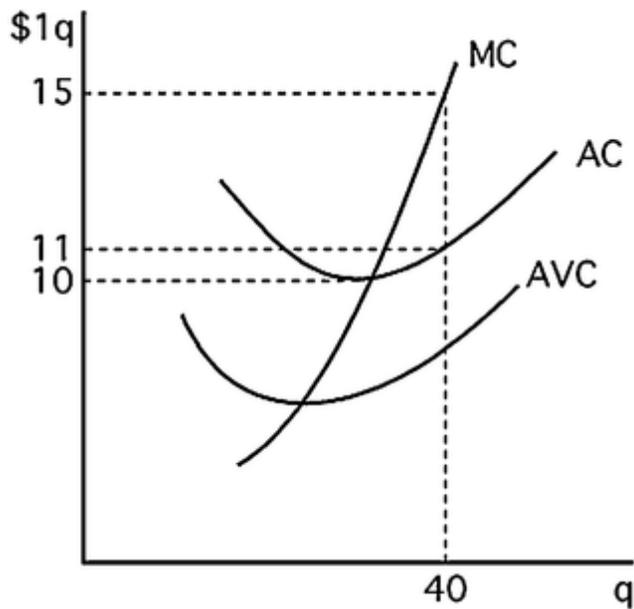
9. Which of the following statements best describes a production function?
 - a. the maximum profit generated from given levels of inputs
 - b. the maximum level of output generated from given levels of inputs
 - c. all levels of output that can be generated from given levels of inputs
 - d. all levels of inputs that could produce a given level of output

10. With respect to production, the short run is best defined as a time period
 - a. lasting about six months.
 - b. lasting about two years.
 - c. in which all inputs are fixed.
 - d. in which at least one input is fixed.

11. Which of the following statements best summarizes the law of diminishing marginal returns?
 - a. In the short run, as more labor is hired, output diminishes.
 - b. In the short run, as more labor is hired, output increases at a diminishing rate.
 - c. In the short run, the amount of labor a firm will hire diminishes as output increases.
 - d. As more labor is hired, the length of time that defines the short run diminishes.

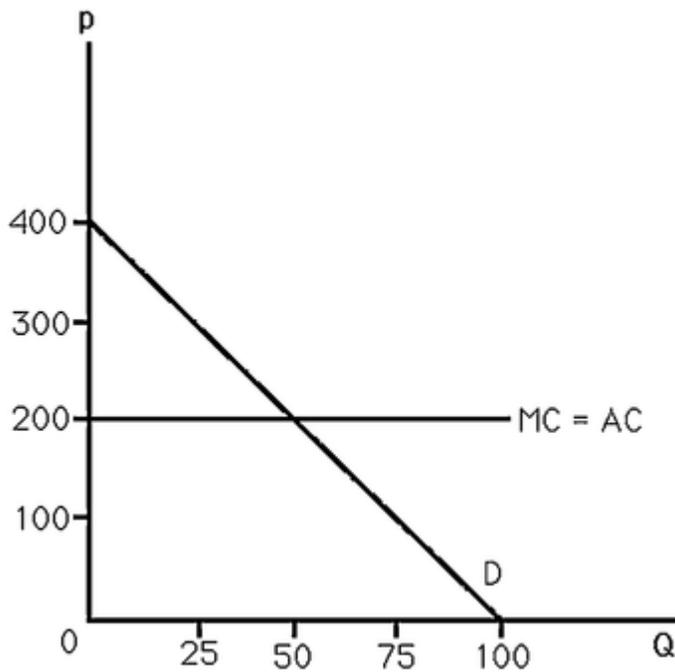
12. The slope of an isoquant tells us
 - a. how much output increases when both inputs are increased.
 - b. the increase in MPPL when capital increases.
 - c. the decrease in capital necessary to keep output constant when labor increases by one unit.
 - d. the decrease in capital necessary to keep MPPL constant when labor increases by one unit.

13. Sarah earns \$40,000 per year working for a large corporation. She is thinking of quitting this job to work full time in her own business. She will invest her savings of \$50,000 (which currently has an annual 10% rate of return) into the business. Her annual opportunity cost of this new business is
- \$0.
 - \$40,000.
 - \$45,000.
 - \$90,000.
14. Joey's Lawncutting Service rents office space from Joey's dad for \$300 per month. Joey's dad is thinking of increasing the rent to \$400 per month. As a result Joey's marginal cost of cutting grass will
- increase by \$100 divided by the amount of grass cut.
 - increase by \$100.
 - decrease by \$100.
 - not change.
15. If average cost is decreasing
- Marginal cost equals average cost.
 - Marginal cost exceeds average cost.
 - Marginal cost is less average cost.
 - Not enough information
16. Firms that exhibit price-taking behavior
- wait for other firms to set price, take it as given, and charge a higher price.
 - have outputs that are too small to influence market price and thus take it as given.
 - take pricing behavior in their own hands.
 - are independently capable of setting price.
17. In a perfectly competitive market,
- firms can freely enter and exit.
 - firms sell a differentiated product.
 - transaction costs are high.
 - All of the above.



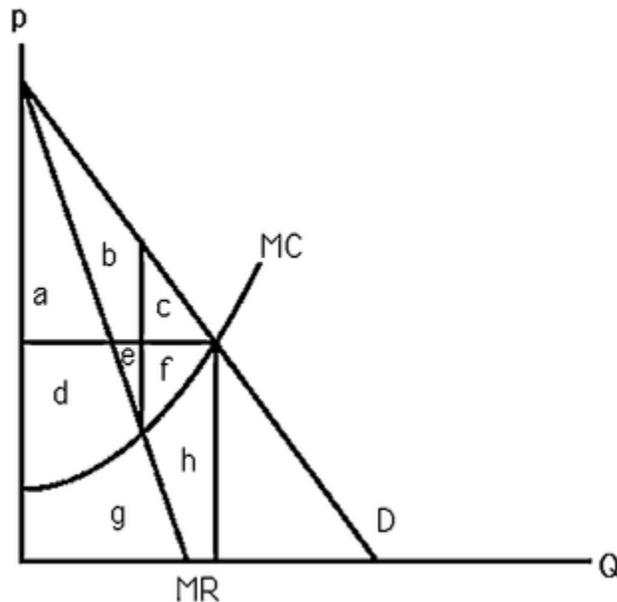
18. The above figure shows the cost curves for a competitive firm. If the market price is \$15 per unit, the firm will earn profits of
- \$0.
 - \$4.
 - \$40.
 - \$160.
19. If a competitive firm maximizes short-run profits by producing some quantity of output, which of the following must be true at that level of output?
- $p > MC$.
 - $MR > MC$.
 - $p \geq AVC$.
 - All of the above.
20. A firm will shut down in the short run if
- total fixed costs are too high.
 - total revenue from operating would not cover all costs.
 - total revenue from operating would not cover variable costs.
 - total revenue from operating would not cover fixed costs.
21. If a firm is a price taker, then its marginal revenue will always equal
- price.
 - total cost.
 - zero.
 - one.

22. One difference between a monopoly and a competitive firm is that
- only a monopoly is a price taker.
 - only a monopoly maximizes profit by setting marginal revenue equal to marginal cost.
 - only a monopoly faces a downward sloping demand curve.
 - None of the above.
23. If the inverse demand function for a monopoly's product is $p = a - bQ$, then the firm's marginal revenue function is
- a.
 - $a - (1/2)bQ$.
 - $a - bQ$.
 - $a - 2bQ$.



24. The above figure shows the demand and cost curves facing a monopoly. The monopoly maximizes profit by selling
- 0 units.
 - 25 units.
 - 50 units.
 - 75 units.

25. The above figure shows the demand and cost curves facing a monopolist. The monopoly maximizes profit by setting price equal to
- \$100.
 - \$200.
 - \$300.
 - \$400.
26. The above figure shows the demand and cost curves facing a monopoly. Maximum profit equals
- \$0.
 - \$100.
 - \$1,000.
 - \$2,500.



27. The above figure shows the demand and marginal cost curves for a monopoly. The deadweight loss of this monopoly equals
- h.
 - c.
 - c + f.
 - c + d + e + f.
28. Perfect price discrimination is
- realistic.
 - practiced by many firms.
 - a purely theoretical possibility.
 - very common.

29. Perfect competition and monopolistic competition are similar in that firms in both types of market structure will
- act as price takers.
 - produce a level of output where price equals marginal cost.
 - earn zero profit in the long run.
 - act as price setters.
30. Oligopoly differs from monopolistic competition in that an oligopoly includes
- product differentiation.
 - barriers to entry.
 - no barriers to entry.
 - downward-sloping demand curves facing the firm.
31. Monopolistic competition and monopoly have all of the following in common EXCEPT
- $P > MC$.
 - Firms are price setters.
 - Barriers to entry.
 - $MR = MC$.
32. Collusion between firms in an oligopoly is more likely to occur when
- there is fear of punishment for not colluding.
 - there is a known finite time horizon.
 - there are large gains to be made by cheating on an agreement.
 - the firms interact in the market for one period.

		Firm B	
		Enter	Do Not Enter
Firm A	Enter	-20 10	0 50
	Do Not Enter	40 0	0 0

33. The above figure shows the payoff to two airlines, A and B, of serving a particular route. If the two airlines must decide simultaneously, which one of the following statements is true?
- Only firm A will enter the market.
 - Only firm B will enter the market.
 - Neither firm entering is a Nash equilibrium.
 - The outcome of the game is unpredictable.
34. A cartel is a group of firms that attempts to
- maximize joint revenue.
 - maximize joint profit.
 - behave independently.
 - increase consumer surplus.
35. Which of the following conditions can help prolong the life of a cartel?
- There are only a few firms in the market and they all belong to the cartel.
 - There are many firms in the market that are not members of the cartel.
 - It is difficult to know what price any cartel member is actually charging.
 - The cartel has no ability to punish members who cheat on the cartel.