Economics 101
Spring 2009
Professor Wallace

Economics 101 Midterm Exam #1

February 26, 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.

    Use the #2 lead pencil to fill in your name on the answer sheet.

    Fill in your student number on the answer sheet.

    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.

    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.

Use the following to answer question 1:

Figure: Guns and Butter
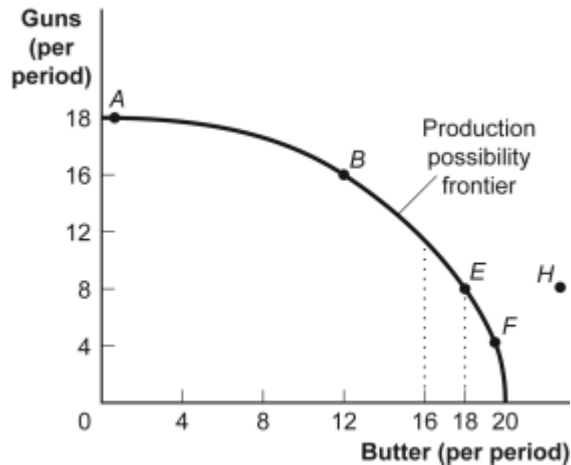
1. (Figure: Guns and Butter) If the economy were producing 8 units of guns and 12 units of butter per period:
   A) **this is a possible choice, but would involve inefficiency.**
   B) the notion of increasing opportunity cost is invalidated.
   C) the economy is still efficient but has made a decision not to buy as much as it could.
   D) something must be done to reduce the amount of employment.

2. When building a model, economists:
   A) **simplify reality in order to highlight what really matters.**
   B) attempt to duplicate reality in all its complexity.
   C) ignore the facts, and instead try to determine what the facts should be.
   D) are careful to avoid the scientific method.

3. With trade, a country may:
   A) **consume outside its production possibility frontier.**
   B) consume inside its production possibility frontier.
   C) find that its production possibility frontier will shift outward.
   D) avoid opportunity costs.

4. If they spend all night writing computer programs, Laurence can write 10 programs while Carrie Anne can write 5. If they spend all night making sunglasses, Laurence can make 6 while Carrie Anne can make 4. We know that:
    A) **Laurence's opportunity cost of writing programs is less than that of Carrie Anne.**
    B) Laurence's opportunity cost of writing programs and of making sunglasses is less than that of Carrie Anne.
    C) Carrie Anne's opportunity cost of writing programs and of making sunglasses is less than that of Laurence.
    D) Carrie Anne's opportunity cost of writing programs is less than that of Laurence.

5. If they spend all night writing computer programs, Laurence can write 10 programs while Carrie Anne can write 5. If they spend all night making sunglasses, Laurence can make 6 while Carrie Anne can make 4. We know that:
    A) **Laurence has a comparative advantage in programs.**
    B) Laurence has a comparative advantage in both programs and sunglasses.
    C) Carrie Anne has a comparative advantage in programs.
    D) Carrie Anne has a comparative advantage in both programs and sunglasses.

6. Economists usually make the assumption that production is subject to increasing opportunity costs because:
    A) higher production usually results in more inflation.
    B) **all resources are not equally suited to producing every good.**
    C) individuals desire constantly increasing opportunities to make themselves better off.
    D) if production is efficient, it is not possible to increase the production of all goods simultaneously.

Use the following to answer question 7:

Table: Wheat and Aluminum

	Wheat Production	Aluminum Production
U.S.	100	0
	0	100

|	Wheat Production	Aluminum Production
Germany	50	0
	0	100

7. (Table: Wheat and Aluminum) The United States and Germany can produce both wheat and aluminum. The table shows the maximum annual output combinations of wheat and aluminum that can be produced. Which of the following choices would represent a possible trade based upon specialization and comparative advantage that would make both countries better off?
   A) Germany would trade 2 wheat to the U.S. for 1 aluminum.
   B) Germany would trade 2 aluminum to the U.S. for .5 wheat.
   C) The United States would trade 1 wheat to Germany for 1 aluminum.
   D) The United States would trade 1 wheat to Germany for 1.5 aluminum.

8. The Kansas market for corn is considered a competitive market. This means there are _____ buyers and _____ sellers of corn in Kansas.
   A) many; few
   B) few; many
   C) many; many
   D) few; few

9. The law of demand states that, other things equal:
   A) as the price increases, the quantity demanded will increase.
   B) as the price decreases, the demand curve will shift to the right.
   C) as the price increases, the demand will decrease.
   D) as the price increases, the quantity demanded will decrease.

10. If goods A and B are substitutes, a decrease in the price of good B will:
   A) increase the demand for good A.
   B) increase the demand for good B.
   C) decrease the demand for good A.
   D) increase the demand for good B and decrease the demand for good A.

11. A good is normal if:
    A) when income increases, the demand remains unchanged.
    B) when income increases, the demand decreases.
    C) when income increases, the demand increases.
    D) income and the demand are unrelated.

12. Which of the following will *not* cause an increase in the supply of cornflakes?
    A) an increase in the price of cornflakes
    B) a cost-saving improvement in the technology of corn production
    C) a reduction in the price of corn
    D) the expectation by producers that the price of cornflakes will fall in the future, because they anticipate the release of a government report that claims that oat bran is healthier than cornflakes

13. The market equilibrium is found at the:
    A) price where quantity demanded exceeds quantity supplied.
    B) price where quantity demanded equals quantity supplied.
    C) price where quantity supplied exceeds quantity demanded.
    D) highest price the market will bear.

14. The primary difference between a change in supply and a change in the quantity supplied is that:
    A) a change in quantity supplied is a movement along the supply curve, while a change in supply is a shift in the supply curve.
    B) both a change in quantity supplied and a change in supply are movements along the supply curve, only in different directions.
    C) a change in supply is related to the supply curve, while a change in quantity supplied is related to shifts in the demand curve that elicit a change in supply.
    D) a change in supply is a movement along the supply curve, while a change in quantity supplied is a shift in the supply curve.

15. If the quantity supplied in a market exceeds the quantity demanded in a market, we would expect prices to:
    A) stay the same.
    B) rise.
    C) fall.
    D) rise in order to clear the market.

16. In the market for beef, what would cause a price increase?
    A) The price of chicken decreases.
    B) Your doctor tells you that you cannot have saturated fat anymore.
    C) The prices of grass and corn increase.
    D) There is a movement in the United States towards vegetarianism.

Use the following to answer questions 17-19:

**Figure: Supply and Demand in the Orange Juice Market**
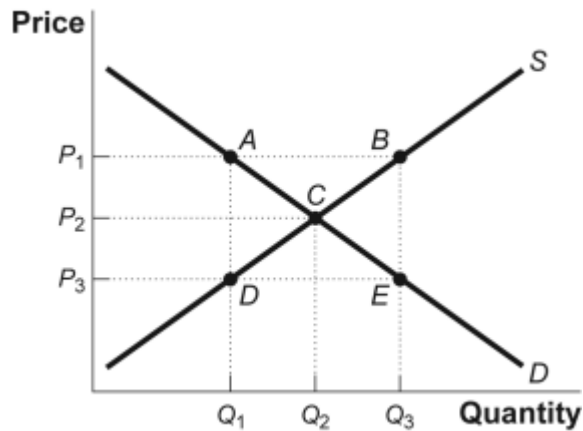
17. (Figure: Supply and Demand in the Orange Juice Market) Assume that a hurricane hits Florida. In response, what would be the most likely equilibrium point in the orange juice market illustrated?
    A) A
    B) B
    C) D
    D) E

18. (Figure: Supply and Demand in the Orange Juice Market) Suppose most people only drink orange juice with champagne. What will be the new equilibrium point in the orange juice market if a law banning alcohol passes?
    A) A
    B) B
    C) D
    D) E

19. (Figure: Supply and Demand in the Orange Juice Market) A reputable scientist asserts in a major scientific publication that drinking orange juice will increase your life span. We can expect the new equilibrium point in the orange juice market to be at:
    A) A.
    B) B.
    C) D.
    D) E.

20. If the price of a good is increased by 20% and the quantity demanded changes by 15%, then the price elasticity of demand is equal to:
    A) **0.75.**
    B) approximately 0.33.
    C) approximately 1.33.
    D) 1.

21. A men's tie store sold an average of 30 ties per day when the price was $5 per tie but sold 50 of the same ties per day when the price was $3 per tie. The absolute value of the price elasticity of demand, using the arc elasticity formula (midpoint method), is:
    A) greater than zero but less than 1.
    B) **equal to 1.**
    C) greater than 1 but less than 3.
    D) greater than 3.

Use the following to answer questions 22-23:

Figure: Market for Oranges in Southlandia
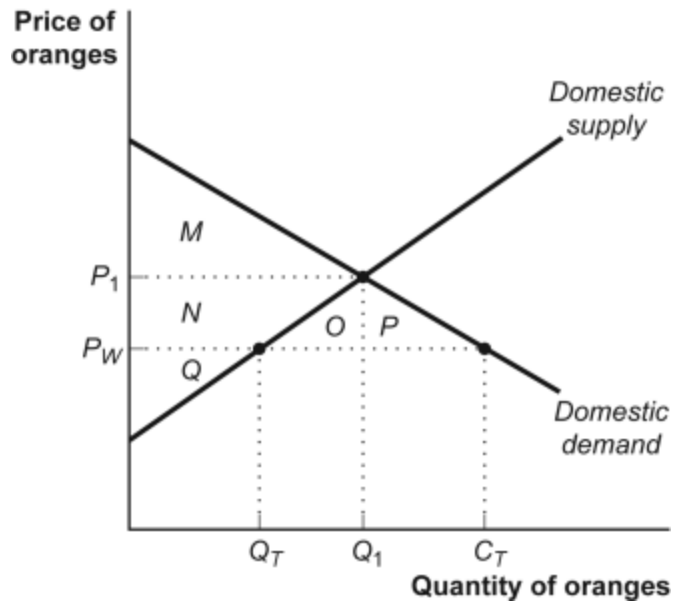
22. (Figure: Market for Oranges in Southlandia) With no trade, the price of oranges in Southlandia is P_1. When the economy is opened to trade, the price falls to P_W. Southlandia will _____ oranges and the volume of trade will equal _____.
    A) **import; $C_T - Q_T$**
    B) export; $C_T - Q_T$
    C) import; $Q_1 - Q_T$
    D) export; $C_T - Q_1$

23. (Figure: Market for Oranges in Southlandia) With no trade, the price of oranges in Southlandia is P_1. When the economy is opened to trade, the price falls to P_W and the change in total surplus is:
    A) O.
    B) **$O + P$.**
    C) $M + N + O + P$.
    D) $M + N + O + P + Q$.

24. A price ceiling is:
    A) **a maximum price sellers are allowed to charge for a good or service.**
    B) the difference between the quantity supplied and quantity demanded.
    C) a minimum price buyers are required to pay for a good or service.
    D) the deadweight loss caused by an inefficiently low quantity.

Use the following to answer question 25:

Figure: Market for Blue Jeans
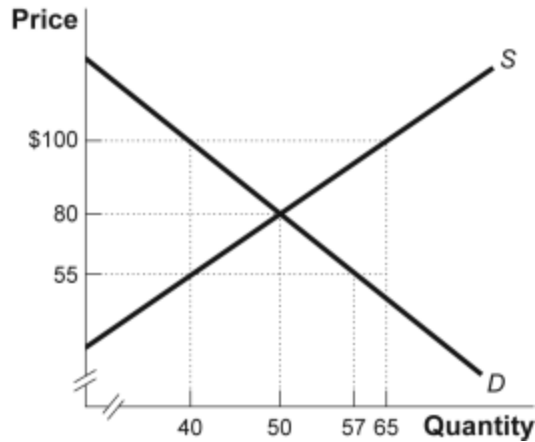
25. (Figure: Market for Blue Jeans) If a price ceiling at $100 exists in the market for jeans, the market outcome would be:
    A) a surplus of 17 jeans.
    B) a surplus of 7 jeans.
    C) a shortage of 17 jeans.
    D) none of the above.

26. Suppose the cross-price elasticity between demand for Burger King burgers and the price of McDonald's burgers is 0.8. If McDonald's increases the price of its burgers by 10%, then:
    A) Burger King will sell 10% more burgers.
    B) Burger King will sell 8% more burgers.
    C) Burger King will sell 8% fewer burgers.
    D) We cannot tell what will happen to Burger King, but McDonald's will sell 8% fewer burgers.

27. An indifference curve is a line that shows all the consumption bundles that:
    A) an individual can purchase with a given income.
    B) yield the same total utility for an individual.
    C) yield the same marginal utility.
    D) have the same marginal rate of substitution.

28. If a consumer moves upward along an indifference curve, his or her total utility:
    A) remains constant.
    B) first decreases, then increases.
    C) increases.
    D) first increases, then decreases.

29. The marginal rate of substitution shows how a consumer can substitute between two goods to:
    A) maintain the same income.
    B) maintain the same level of total utility.
    C) maintain the same marginal utility.
    D) increase total utility.

Use the following to answer question 30:

Figure and Table: Indifference Curve Map
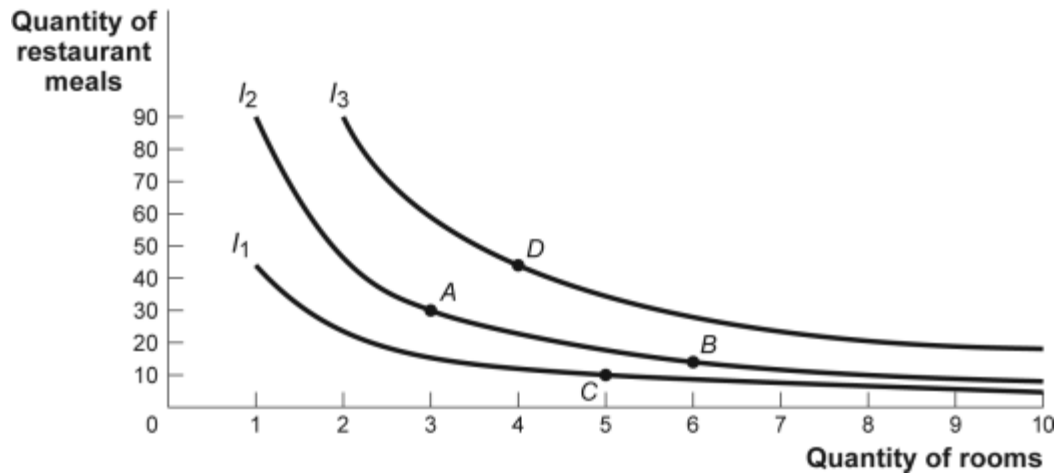
Consumption Bundle	Quantity of Rooms	Quantity of Meals	Total Utility (utils)
A	3	30	450
B	6	15	450
C	5	10	391
D	4	45	519

30. (Figure and Table: Indifference Curve Map) Which of the following statements is true regarding the accompanying figure?
   A) Combination *A* is preferred to combination *B*.
   B) Combination *B* is preferred to combination *D*.
   C) Combination *C* is preferred to combination *A*.
   D) Combination *B* is preferred to combination *C*.

31. Which of the following statements is correct?
   A) The slope of an indifference curve shows the rate at which two goods can be exchanged without changing the total budget.
   B) The slope of a utility curve shows the rate at which two goods can be exchanged without changing the total budget.
   C) The slope of an indifference curve shows the rate at which two goods can be exchanged without changing total utility.
   D) The slope of a marginal utility curve shows the rate at which two goods can be exchanged in order to increase consumer's marginal utility.

Use the following to answer questions 31-35.

The market for Robusa coffee beans is characterized by the demand and supply equations
$Q_s = 40 \cdot P - 60$ and $Q_d = 420 - 40 \cdot P$

32. The equilibrium in the market for Robusta coffee beans occurs where
   A) P=8, Q=60
   B) P=4, Q=180
   C) P=5, Q=60
   D) P=6, Q=180

33. The price elasticity of demand at the equilibrium is
   A) 3/2
   B) 2/3
   C) 3/4
   D) 4/3

34. Suppose the government imposed a $2 per unit (kilo) tax on Robusta coffee beans. The incidence of the tax on consumers would be _____ and the equilibrium price paid by consumers would be _____.
   A) 0.5, $7
   B) 0.75, $5.5
   C) 0.5, $5
   D) 0.75, 6

35. The deadweight loss associated with a $2 unit tax on Robusta coffee beans is
   A) $80
   B) $40
   C) $60
   D) $100