

Name _____

Student Number _____

Answer multiple choice questions on the green answer sheet. The remaining questions can be answered in the space provided on this test sheet

Econ 321 Test 1 Fall 2005

Multiple Choice (2.5 points each)

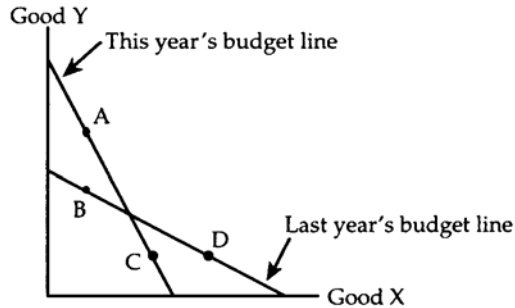
Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. According to the law of demand, if other relevant factors remain unchanged, then a rise in the price of a commodity will cause
- a reduction in the equilibrium quantity.
 - excess supply.
 - suppliers to reduce their production in reaction to the lower demand.
 - a fall in the quantity demanded.
- _____ 2. A fall (reduction) in supply is illustrated by
- a downward shift in the supply curve.
 - moving the equilibrium point down and to the left along the supply curve.
 - drawing the supply curve flatter.
 - shifting the supply curve to the left.
- _____ 3. A fear that consumption of beef may be related to a life threatening disease spreads rapidly through France. The market result will be:
- demand falls, price decreases and therefore French consumers buy more beef.
 - demand falls, price decreases and the quantity supplied therefore falls.
 - the demand curve shifts to the left and the supply curve shifts to the left.
 - the equilibrium quantity falls, but the price does not change.
- _____ 4. Which of the following could decrease the equilibrium price but increase the equilibrium quantity of oranges?
- Higher wages are paid to the agricultural workers who harvest the oranges.
 - A rise in the cost of treating pests destroying oranges.
 - A fall in the cost of treating pests destroying oranges.
 - An increase in the market supply of grapefruit.
- _____ 5. The imposition of a sales tax (a tax which is legally paid by consumers of a good) on eggs will:
- Cause a parallel shift downward in the demand curve for eggs.
 - Cause a parallel shift upward in the demand curve for eggs.
 - Lead to an increase in the slope of the demand curve for eggs.
 - Have no effect in demand or sales of eggs since they are a small part of any family's budget.
- _____ 6. The prices typically studied in microeconomics are
- relative prices.
 - absolute prices.
 - money prices.
 - retail prices.

- _____ 7. Suppose that there are only two goods in Spain, chocolate and bottled water. The absolute price of a 100-gram bar of chocolate is 200 pesetas, and the absolute price of a liter of bottled water is 100 pesetas. What is the relative price of bottled water in terms of chocolate?
- 100 grams of chocolate per liter of water.
 - 200 grams of chocolate per liter of water.
 - 50 grams of chocolate per liter of water.
 - 400 grams of chocolate per liter of water.
- _____ 8. Suppose there are only two goods: food and clothing. What does it mean for the U.S. to have a comparative advantage in food production?
- The U.S. needs fewer resources to grow a given amount of food than do other nations.
 - The U.S. sacrifices less clothing production to grow a given amount of food than do other nations.
 - In the U.S., food production needs fewer resources than does a comparable amount of clothing production.
 - In the U.S., food production costs less than does clothing production.
- _____ 9. In 1 hour, Robinson Crusoe can either shoot 4 birds or catch 4 fish. A typical native on a nearby island can either shoot 5 birds or catch 10 fish in an hour's time. Which of the following is true according to the doctrine of comparative advantage?
- Crusoe will be better off if he specializes in either activity and then trades with the natives.
 - The natives have a comparative advantage in both shooting birds and catching fish, so Crusoe cannot make himself better off by trading with the natives.
 - Crusoe should concentrate on shooting birds and then trade with the natives to obtain fish.
 - Crusoe should spend his time catching fish, and he should trade with the natives to obtain birds.
- _____ 10. Under standard assumptions, which of the following is *not* a property of indifference curves?
- They are downward sloping and convex to the origin.
 - They fill the plane and never cross.
 - Their slope is equal, in magnitude, to the relative price of the goods.
 - Baskets of goods on indifference curves further away from the origin provide more satisfaction than those which are closer to the origin.
- _____ 11. Suppose that an indifference curve for Jack is drawn measuring quantities of coffee along the horizontal axis and quantities of root beer along the vertical axis. If the marginal value of an additional cup of coffee is 3 root beers for Jack, the (absolute value of the) slope of his indifference curve in this range is
- $1/3$.
 - 3.
 - 6
 - dependent upon the prices of the two goods
- _____ 12. A budget line is constructed to show
- how consumers who budget their expenditures achieve more satisfaction than those who do not.
 - the set of all baskets that the consumer can afford, given prices and his or her income.
 - the set of all baskets that the consumer would be willing to purchase given various prices for the goods in the basket.
 - the set of all baskets that the consumer considers equally desirable.

- ___ 13. Consider the budget line for goods X and Y (with the quantity of X on the horizontal axis). When the price of good X rises, what happens to the budget line?
- The budget line shifts in, with no change in the slope.
 - The budget line becomes flatter, and the horizontal intercept moves to the right.
 - The budget line becomes steeper, with no change in the vertical intercept.
 - The budget line pivots about the horizontal intercept, with the vertical intercept moving up.
- ___ 14. How would a budget line for good X and Y be affected if income and both prices all simultaneously doubled?
- It would shift out so that all quantities are doubled.
 - It would shift in so that all quantities are halved.
 - It would not be affected.
 - The slope would be doubled.
- ___ 15. **Budget Lines**

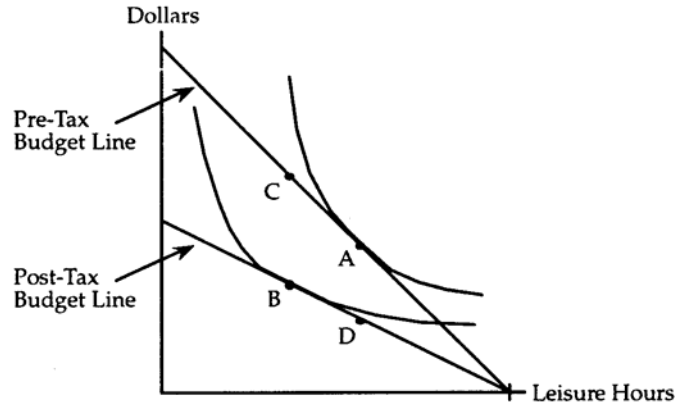
This question refers to the following diagram, which shows the budget lines faced by a consumer last year and this year.



Refer to the diagram for the preceding question. If the consumer purchased basket B last year and purchases basket C this year, we can conclude that

- the consumer is not behaving optimally.
- the consumer's tastes changed between this year and last year.
- the consumer's indifference curves cannot be convex.
- the law of demand does not hold for this consumer.

16. The accompanying diagram shows the effect of levying an income tax on the consumer. The pre-tax optimum is at point A, and the post-tax optimum is at point B.



- To measure the amount of tax money collected by the government, one uses the vertical distance between points
- A and B.
 - A and D.
 - B and C.
 - B and D.
17. Consider an income tax (a tax on earnings from labor hours) and a head tax (a "lump sum" tax), the sizes of which have been set so that the government collects the same amount of money under each tax. Which tax does the consumer prefer?
- The consumer is indifferent between the two taxes, since he pays the same amount of money under each tax.
 - The consumer prefers the head tax, because it does not lower the relative wage as does the income tax.
 - The consumer prefers the income tax, because it can be avoided by increasing the amount of leisure time consumed.
 - The consumer may prefer either tax, depending on whether the income tax increases or decreases the number of hours of work at the optimum.
18. Suppose that good X is on the horizontal axis and all other goods (measured in dollars) are on the vertical axis in the consumer-choice diagram. If the consumer loses \$10 in income, then
- the new budget line is parallel to and lies 10 units to the left of the old budget line.
 - the budget line shifts down by 10 dollars, with no change in the slope.
 - the vertical intercept of the budget line shifts down by \$10, but the horizontal intercept remains unchanged.
 - the slope of the budget line increases by 10 percent.
19. With an increase in income, we can predict that a consumer will choose a new market basket
- on a lower indifference curve.
 - on the same indifference curve but the new budget line.
 - on a higher indifference curve that passes through the new budget line.
 - on a higher indifference curve that is tangent to the new budget line
20. Economists use the term normal good to refer to goods that
- you consume on a daily basis.
 - you consume more of when your income falls.
 - you consume more of when your income rises.
 - consumers choose the same quantities of regardless of income.

- _____ 21. An upward-sloping Engel curve indicates that
- a. the good is normal.
 - b. the good is inferior.
 - c. demand for this good is elastic.
 - d. demand for this good is inelastic.
- _____ 22. To derive an ordinary demand curve for good X from the consumer choice (indifference curve/budget line) diagram,
- a. change the price of good X in the consumer choice diagram and observe the change in the quantity of good X among the optimum market baskets.
 - b. change the prices of both goods in the consumer choice diagram and observe the change in the quantity of good X among the optimum market baskets.
 - c. change the price of good Y in the consumer choice diagram and observe the change in the quantity of good X among the optimum market baskets.
 - d. change the consumer's income in the consumer choice diagram and observe the change in the quantity of good X.
- _____ 23. When the price of a good rises, the resulting change in relative price causes the consumer to reduce his quantity demanded of that good, even when the consumer is income-compensated so that he remains indifferent about the price change. This observation is known as the
- a. Giffen good phenomenon.
 - b. law of demand.
 - c. substitution effect.
 - d. income effect.
- _____ 24. Suppose the price of a good rises. When will the resulting income effect reduce the quantity demanded of the good?
- a. Always.
 - b. Whenever the good is a non-Giffen good.
 - c. Only when the good is normal.
 - d. Only when the good is inferior.
- _____ 25. What types of goods have compensated demand curves that slope downwards?
- a. Normal goods only.
 - b. Inferior goods only.
 - c. Giffen goods only.
 - d. All types of goods.

Analytical Questions

1. (7.5 points) A person argues that if the prison sentences for all crimes were doubled, this would worsen the problem of overcrowded prisons, all other things being equal. Use the concept of demand to explain why this argument is incorrect.

2. (15 points) Suppose the demand curve for bus travel is downward sloping, and the income elasticity of demand for bus travel is negative.
- (i) Design an indifference curve-budget line diagram showing the substitution and income effects created when the price of bus travel falls. In your diagram, place bus travel on the horizontal axis and all other goods on the vertical axis.
 - (ii) How you can tell from your diagram that the income elasticity of demand for bus travel is negative? Explain.

3. (15 points) Suppose the price of cheese has recently risen from \$4 to \$6 per pound, while the price of fruit has fallen from \$8 to \$6 per pound. During this time, Miguel's income has stayed fixed at \$48 per week. Before the price changes, Miguel had been buying 4 pounds of cheese and 4 pounds of fruit per week. Since the price changes, he has been buying 2 pounds of cheese and 6 pounds of fruit weekly. Assuming Miguel's preferences have not changed, is it possible to say whether the price changes have made Miguel better off or worse off? Explain.