

Economics 101
Professor H. Quirnbach
First Midterm Exam

PRINT NAME _____
STUDENT ID NO. _____
DISCUSSION DAY & TIME _____

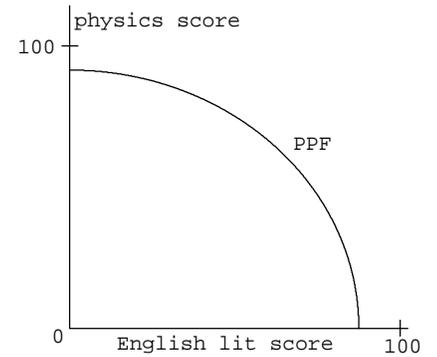
SCORE _____

INSTRUCTIONS:

1. Fill in all requested information above and on the answer sheet.
2. There are 25 multiple choice questions and one problem. Enter one and only one answer for each multiple choice question on the answer sheet. There is no penalty for guessing. On the answer sheet, completely darken the letter representing your choice for each question. Do the problem on the test paper itself. Also, do all scratch work on the test paper. Use the backs of the pages, as necessary.
3. You are allowed to have one 8.5" x 11" sheet of notes with you at your seat and to use a calculator. You are not allowed to use any other books, notes, etc.

MULTIPLE CHOICE QUESTIONS--Choose the ONE best answer for each question.

1. Fred has a total of ten hours to divide between studying for his physics and English Lit exams. The pair of exam scores he "produces" will depend on how he allocates his study time. In the figure, the maximal score combinations that Fred can "produce" by studying alone are given by his "production possibility frontier," where the axes measure scores on the respective exams.



Fred's girlfriend Yolanda is a physics major from Hungary who speaks no English. Yolanda now offers to help Fred study. Assuming that Fred speaks Hungarian, then, at the time of Yolanda's offer, Fred's PPF most likely

- a. shifts outward in all directions.
- b. shifts inward, since Fred might later choose to waste time flirting.
- c. stays where it is, since Fred's IQ has not changed.
- d. shifts outward along the English Lit axis only, since he can now allocate more time to his English exam.
- e. shifts outward along the physics axis only.

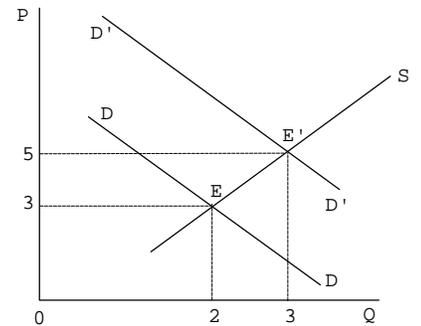
2. Jane currently consumes five hamburgers and eight Diet Pepsis per week. To estimate her marginal utility of hamburgers, the best procedure would be to

- a. divide her total utility by five.
- b. divide her total utility by eight.
- c. divide her total utility by thirteen.
- d. measure her utility gain from consuming one more hamburger per week.
- e. measure her utility loss from consuming one less Pepsi per week.

3. In the model of consumer choice, the budget line

- a. represents the largest bundles the consumer can afford to buy.
- b. graphs bundles all of which provide equal utility.
- c. cannot cross any indifference curve.
- d. is what would be vetoed by a "line item veto."
- e. both a. and b.

4. The figure represents the demand and supply conditions for peaches. The reason the demand curve may shift from DD to D'D' is that



- a. income increases and peaches are a normal good.
- b. income increases and peaches are an inferior good.
- c. the price of pears (a substitute) rises.
- d. both a. and c.
- e. both b. and c.

5. In the preceding figure, the own price elasticity of supply, figured by the arc method between E and E', is

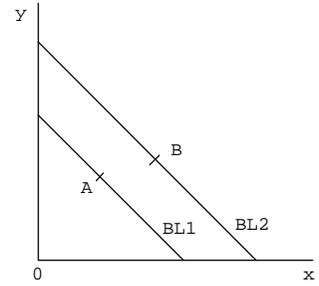
- a. 3/5
- b. 4/5
- c. 2/3
- d. -3/5
- e. -4/5

6. Which of the following should NOT cause a consumer product's supply curve to shift to the right?
- an increase in the quantity demanded
 - a technology development that lowered production costs
 - negotiating a wage decrease in a labor contract
 - None of the above should cause a rightward shift in supply.
 - Reasons a., b., and c., all should cause a rightward shift in supply.
7. Which of the following statements is/are positive (as opposed to normative)?
- A utility-maximizing consumer always spends his entire income.
 - Each consumer ought to give some of her income to charity.
 - It is possible for a consumer to choose a bundle of goods outside her budget line.
 - both a. and b.
 - both a. and c.
8. Which of the following is true of the comparison of microeconomics with macroeconomics?
- Micro worries about the consumer balancing his budget while macro worries about the government balancing its budget.
 - Macro worries about the price of index cards while micro worries about the consumer price index.
 - "Microeconomics" refers to shorter courses in economics; "macroeconomics" to longer courses.
 - both a. and b.
 - all of the above
9. For a Giffen good, when the price of the good increases, the income and substitution effects
- go in the same direction, and the income effect is larger.
 - go in the same direction, and the substitution effect is larger.
 - go in opposite directions, and the income effect is larger.
 - go in opposite directions, and the substitution effect is larger.
 - go in opposite directions, and either effect may be larger.
10. If the demand for seedless grapes has an income elasticity of 1.5,
- the demand is "elastic."
 - the demand is "inelastic."
 - grapes are a normal, necessary good.
 - grapes are a normal, inferior good.
 - grapes are a normal, luxury good.
11. The cross elasticity of Imelda's demand for shoes with respect to the price of handbags is -1.5. Thus, if the price of handbags goes up by
- 2%, Imelda buys 3% fewer handbags.
 - 2%, Imelda buys 3% more shoes.
 - 3%, Imelda buys 2% fewer shoes.
 - 3%, Imelda buys 2% more shoes.
 - 2%, Imelda buys 3% fewer shoes.

12. The ISU Budget Office wants to increase the university's total tuition revenue. They hire you as a consultant, with your only fee to be equal to half of any increase in tuition revenue that your advice generates. You do a study and find that students' price elasticity of demand for courses is exactly -1.0 . If your sole objective is to maximize your own income, you
- recommend that the tuition per course be raised.
 - recommend that the tuition per course be lowered.
 - recommend that the university close the library.
 - recommend that the university admit fewer students.
 - look for another job.
13. If apples and oranges are substitutes,
- an increase in the price of apples causes the demand curve for oranges to shift to the left.
 - an increase in the price of apples causes the demand curve for oranges to shift to the right.
 - an increase in the price of apples causes the demand curve for apples to shift to the left.
 - an decrease in the price of oranges causes the demand curve for apples to shift to the right.
 - none of the above.
14. The day after the Iowa football team lost the 1991 Rose Bowl, the demand curve for "Iowa Rose Bowl 1991" T-shirts dropped dramatically. The most likely cause of this demand shift is
- a change in income.
 - a change in tastes.
 - a change in the price of T-shirts.
 - a change in the bus fare to the Rose Bowl.
 - a change in the supply curve for T-shirts.
15. The problem of scarcity in economics
- implies that an economy cannot produce outside its PPF.
 - means that consumers' wants and needs exceed the capacity of the economy's resources to produce.
 - implies that using a resource to satisfy one consumer's needs might result in the similar needs of some other consumer not being met.
 - both a. and b.
 - all of the above
16. The price of bagels is 40 cents apiece. At that price, Hanna will demand two bagels, while Woody will demand three. If Hanna's two sisters have the same tastes and income that she has, and if Woody's twin brother is identical to him in every way, the market demand of these people for bagels when the price is 40 cents is
- 5 bagels.
 - 6 bagels.
 - 10 bagels.
 - a dozen bagels.
 - 40 bagels.

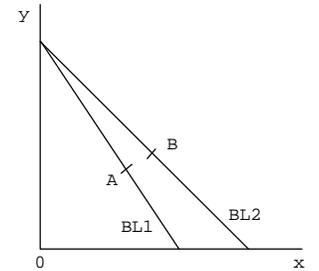
17. For the consumer whose budget lines are graphed in the figure, if on BL1 the consumer demands bundle A while on BL2 she demands B,

- a. goods x and y are substitutes.
- b. goods x and y are both luxuries.
- c. goods x and y are both normal.
- d. good x is a luxury while y is inferior.
- e. good y is necessary while x is inferior.



18. For the consumer whose budget lines are graphed in the figure, if on BL1 the consumer demands bundle A while on BL2 she demands B,

- a. goods x and y are both normal.
- b. good x is a Giffen good.
- c. good y is a substitute for x.
- d. good y is a complement for x.
- e. not enough information is given to verify any of these statements.

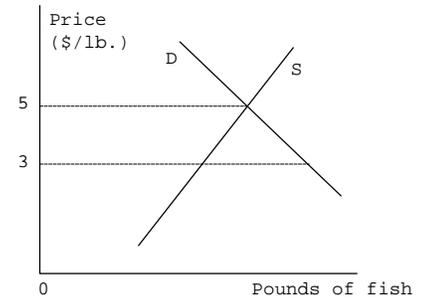


19. You are NOT violating the principle of ceteris paribus if you draw the demand curve for carrots by graphing the quantities of carrots you observe being demanded while

- a. the price of carrots is changing.
- b. consumers' tastes are changing.
- c. consumers' incomes are changing.
- d. the price of beans is changing.
- e. All of the above would violate ceteris paribus.

20. The figure graphs the supply and demand curves for fish. If the government adopts a price floor policy for fish at a floor of \$3/lb., then from equilibrium

- a. price and quantity sold will both rise.
- b. price and quantity sold will both fall.
- c. price will rise and quantity will fall.
- d. price will fall and quantity will rise.
- e. price and quantity will stay the same.



21. In the same figure as the preceding question, if the government instead were to adopt a price ceiling policy at a ceiling of \$3/lb., then from equilibrium

- a. price and quantity sold will both rise.
- b. price and quantity sold will both fall.
- c. price will rise and quantity will fall.
- d. price will fall and quantity will rise.
- e. price and quantity will stay the same.

22. The demand for product x is likely to be less elastic if
- there are many substitutes for x rather than few.
 - consumers have more rather than less time to adjust to price changes.
 - x is a luxury good rather than an inferior good.
 - a consumer needs x to survive.
 - both a. and b.
23. Suppose that Chester's demand for fried chicken wings is "inelastic" and that he regards chicken wings as an "inferior" good. If we observe that the quantity of wings Chester demands has gone down by 10%, which of the following is/are possible explanations?
- The price of wings has increased by more than 10%.
 - The price of wings has increased by less than 10%.
 - Chester's income has decreased and by more than 10%.
 - Chester's income has decreased but by less than 10%.
 - Both a. and c. are possible explanations.
24. Suppose that Marsha chooses amounts of only two goods, x and y. Suppose further that her current bundle of goods is on her current budget line and that, at that bundle, her marginal utility of good x is 2, while her marginal utility of good y is 4. The price of x is \$1. Then, Marsha can increase her utility by moving along her current budget line if
- the price of y is greater than \$2.
 - the price of y is equal to \$2.
 - the price of y is less than \$2.
 - her income increases.
 - Both a. and c. are true.
25. Bob tells us that he prefers the bundle (6,3) to the bundle (5,5). We conclude that he also prefers (6,3) to (4,4). Our reasoning process uses
- only the "more is better" principle.
 - only the transitivity principle.
 - only the ceteris paribus principle.
 - both "more is better" and transitivity.
 - both ceteris paribus and "more is better."

Your Name: _____

PROBLEM

Do the following problem. Write your answers on this page in the spaces indicated. Use the grid on the following page for all graphs. Show all scratch work on the front or back of this page. No partial credit can be given without showing scratch work.

1. Let the demand curve for beef be given by $P = -D + 10$, where P is the price in \$/pound and D is the quantity demanded in pounds. Graph this demand curve on the grid on the next page. Label it "DD."

2. Let the initial supply curve for beef be given by the following table. Graph this supply curve and label it "SS."

Price	0	1	2	3	4	5	6	7	8	9	10
Quantity Supplied	0	1	2	3	4	5	6	7	8	9	10

3. Label the market equilibrium point "E." Find the equilibrium
Price:_____ Quantity:_____

4. Calculate the demand elasticity at E using the point method: _____

5. Calculate the consumer surplus at E: _____

6. Suppose the supply curve shifts to the following location. Graph this new supply curve and label it "S'S'."

Price	1	2	3	4	5	6
Quantity Supplied	3	5	7	9	11	13

Label the new equilibrium E'. At E' find the
Price:_____ Quantity:_____

7. Calculate the demand elasticity at E' using the point method:_____

8. Calculate the consumer surplus at E': _____

Going from E to E', the change in consumer surplus is _____

