

Part I - Matching. (20 points)

For questions 1-5, match each concept to the BEST definition by placing the corresponding letter in the blank next to the concept. (2 pts. each).

CONCEPTS:

DEFINITIONS:

___1. Opportunity Cost

A. the monetary costs of an activity.

___2. GNP

B. the value of the next best alternative.

___3. GDP

C. the monetary value of a country's production.

___4. Absolute Advantage

D. when you can produce the good at a lower opportunity cost than someone else.

___5. Comparative Advantage

E. when you can produce a greater quantity of goods than someone else with the same quantity of resources.

F. the sum of money values of all final goods and services produced in the domestic economy during a specified period of time.

G. the sum of money values of all final goods and services produced in the nation's economy during a specified period of time.

H. the cost of production in a country

For questions 6-10, place the letter of each location on the circular flow diagram next to the number of the correct description. (2 pts. each).

For Example:

 D Payments for Output.

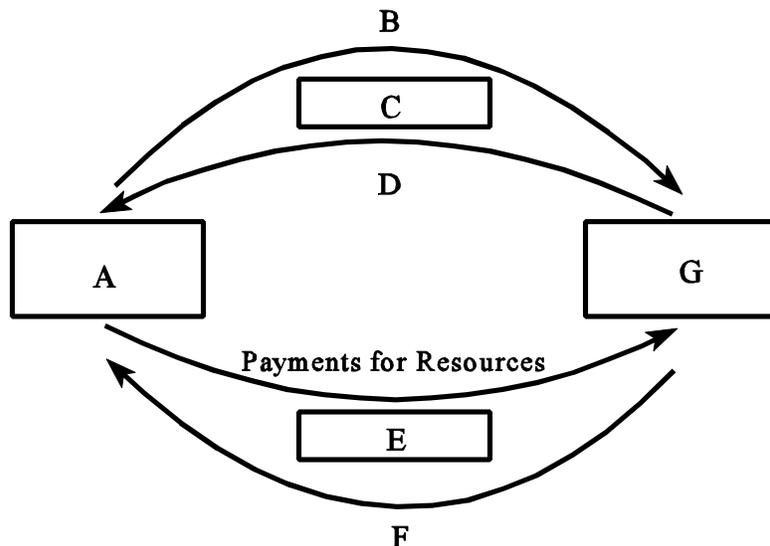
___6. Businesses.

___7. Households.

___8. Factor Markets.

___9. Output Markets.

___10. Goods & Services.



PART II: SHORT ANSWERS
(32 points):

Question 1 (8 points):

There are two small islands in Hawaii. They have decided to build a series of lighthouses. The lighthouses are nonrival in consumption as well as nonexcludable. The demand equations for lighthouses are given below and the marginal social cost of providing a lighthouse is \$7.

$$\text{Island A: } Q = 20 - 2P$$

$$\text{Island B: } Q = 20 - 5P$$

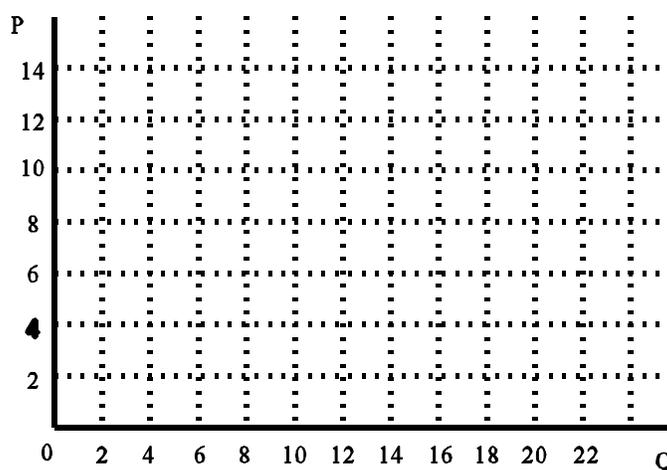
- a. (2 pts). What is the market demand curve for lighthouses? _____
- b. (2 pts). In equilibrium, how many lighthouses will be supplied? _____
- c. (4 pts). How much money will each island contribute if preferences are revealed and each island pays according to the benefits it receives? Island A _____, Island B _____

Part II: Short Answers, continued.Question 2: (16 pts).

Consider the following information about the demand and supply of gasoline.

$$Q_d = 10 - P$$

$$Q_s = 2P - 8$$



a. (4 pts) Draw the Supply(S) and Demand(D) curves on the given graph. What is the equilibrium price(\$) and quantity of gasoline(gallons)? $P = \underline{\hspace{2cm}}$, $Q = \underline{\hspace{2cm}}$.

b. (3 pts) Suppose that the government decides to impose an excise tax of \$3 on suppliers.

- Will this tax result in a shift in or a movement along the supply curve?
- Will this tax result in a shift in or a movement along the demand curve?
- Will the new equilibrium price with the tax be higher or lower or the same?

Question 2, continued:

c. (4 pts) Given the \$3 tax described in part b, calculate the...

consumer tax incidence? _____
tax revenue generated by the tax? _____

d. Calculate the change in Consumer Surplus (CS) and the Deadweight Loss (DWL) due to the tax:

(1 pt) Consumer Surplus after the tax: _____

(1 pt) Consumer Surplus from part a: _____

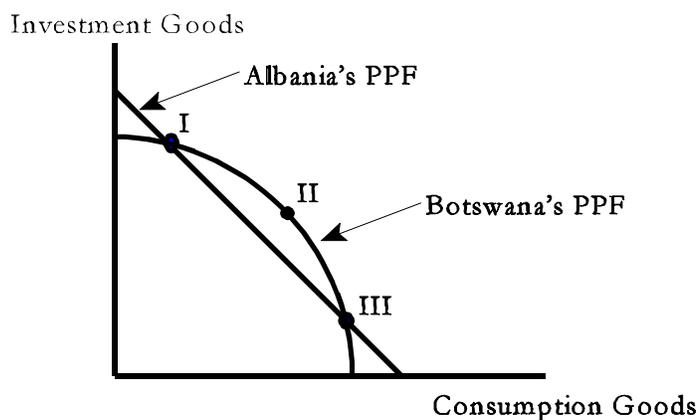
(1 pt) The Change in Consumer Surplus: _____

(2 pts) The Deadweight Loss of the Tax: _____

Part II: Short Answers, continued.

Question 3: (8 points):

The PPFs for Albania (AL.) and Botswana (BO.) are given on the graph below. There are only two goods, investment goods and consumption goods.



(1 pt. each)

- a. Is point II feasible for each country? _____
- b. Which country has an absolute advantage in producing Consumption Goods? _____

(2 pts. each)

- c. Which of the labeled points will enable Botswana to grow their country the fastest? _____
- d. At which of the labeled points is Botswana's opportunity cost of Investment Goods the highest? _____
- e. Assuming that both Albania and Botswana are producing at point III...

which country has a comparative advantage in producing Investment Goods? _____

which country has a comparative advantage in producing Consumption Goods? _____

PART III: Multiple Choice Questions (12 questions, 48 points):

1. Which of the following is a positive economic statement?
- A. Government expenditures are included in a calculation of GDP using the expenditure approach.
 - B. We should increase the sales tax rate because consumption expenditures are too high.
 - C. The higher taxes imposed by the Deficit Reduction Act of 1993 are unfair.
 - D. The government should provide farmers a guaranteed price for their product.
 - E. Assessing taxes on gasoline is the fairest way to fund highway improvements.

Use the following information to answer the next two questions:

Hundred-Acre Wood has two producers: Pooh and Tiger. Each producer can produce either Honey or Bounces. We assume that the opportunity cost is constant along the PPF.

<u>Pooh</u>		<u>Tiger</u>	
<u>Honey</u>	<u>Bounces</u>	<u>Honey</u>	<u>Bounces</u>
10	45	20	40
40	30	40	20

2. What is Pooh's opportunity cost for one more unit of Bounces?
- A. 2 units of Honey
 - B. 1/2 units of Honey
 - C. 2 units of Bounces
 - D. 1/2 units of Bounces
 - E. None of the above.
3. In order to achieve the highest level of production,
- A. Pooh should specialize in Honey and Tiger should specialize in Bounces.
 - B. Pooh should specialize in Bounces and Tiger should specialize in Honey.
 - C. they should both spend equal amounts of time producing Bounces and Honey.
 - D. they should both specialize in Bounces.
 - E. they should not trade with one another at all.
4. Which of the following transactions would be counted in GDP?
- A. A used car you purchase from your neighbor.
 - B. The purchase of 500 oranges from a farmer by a supermarket.
 - C. The purchase of 10 million shares of GM stock by a household.
 - D. The purchase of Budweiser (American-produced beer) by a Japanese importer.
 - E. None of the above

Use the following demand and supply model to answer the next two questions:

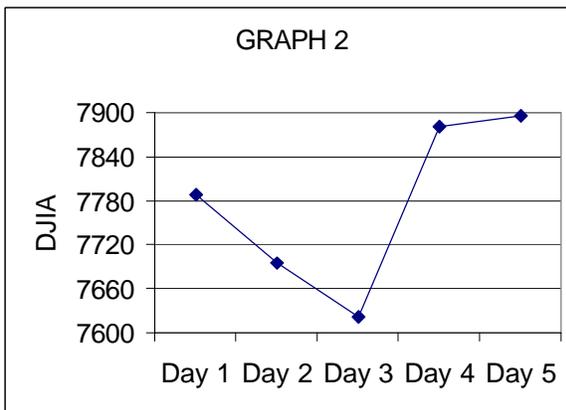
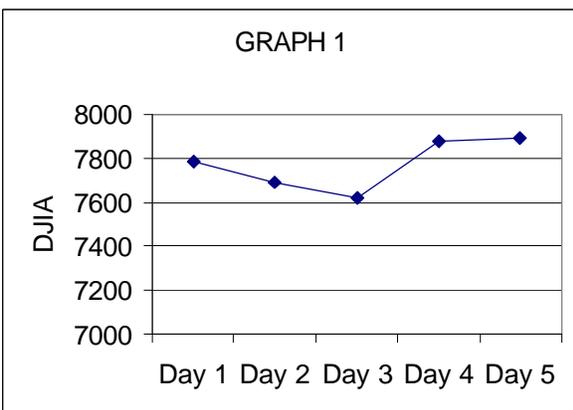
$$D: Q^D = 50 - 2P$$

$$S: Q^S = 11 + P$$

5. Suppose the government sets a price ceiling of \$18. What will be the effect of such a policy?
- A. Excess supply of 9 units
 - B. Excess demand of 9 units
 - C. No effect
 - D. Excess supply of 15 units
 - E. Excess demand of 15 units
6. Now suppose that the government wants to restrict the quantity bought and sold to 20 units. If the government imposes an excise tax to reach this goal, what is the collected tax revenue from this tax?
- A. \$6
 - B. \$120
 - C. \$180
 - D. \$300
 - E. We need more information to answer this question.
7. Macroeconomics differs from microeconomics in that macroeconomics
- A. ignores issues such as national unemployment.
 - B. studies the effect of taxation on markets whereas microeconomics does not.
 - C. analyzes marginal as well as average benefits and costs.
 - D. emphasizes relative prices instead of price indices.
 - E. studies the national economy while microeconomics analyzes the decisions of individual people and firms.
8. Which of the following is an example of an intermediate good?
- A. The wood you purchase to build yourself bookshelves in your room.
 - B. The chocolate you buy to make yourself some cookies.

- C. The pizza sauce you purchase to make pizzas to sell for a fund-raiser for an organization you belong to.
- D. An economic textbook you purchase with the intent to sell the textbook after the course is over.
- E. All of the above.

Use the following graphs to answer the next question.



9. The above graphs show the value of the Dow Jones Industrial Average (DJIA) for two five day time periods. Which of the following statements is true?
- A. The DJIA in Graph 1 is less volatile than the DJIA in Graph 2.
 - B. The DJIA in Graph 2 is less volatile than the DJIA in Graph 1.
 - C. The DJIA is equally volatile (approximately) in both graphs.
 - D. The DJIA in Graph 1 is higher than it is in Graph 2 for the first 3 days, but then the DJIA from Graph 2 is higher for the last two days.
 - E. The change in the DJIA from Day 1 to Day 3 is obviously much worse in Graph 2 than it is in Graph 1.

10. The price of cars as well as the quantity sold has increased in the last few years. Which of the following could explain this situation?

- A. C or D.
- B. C, or D, or E.
- C. An increase in population in the country and an increase in the supply of cars.
- D. An increase in population in this country and a decrease in the supply of cars.
- E. A decrease in population in this country and an increase in the supply of cars.

11. Assume that a new medical study indicates that an apple a day really does keep the doctor away - specifically, your chances for cancer are cut in half by eating apples. Which of the following statements is true?

- A. This would result in a shift in the supply curve, and a movement along the demand curve.
- B. This would result in a shift in the demand curve, and a movement along the supply curve.
- C. This would shift both curves since consumers will demand more, and producers will supply more.
- D. There will be a movement along both curves, resulting in a larger equilibrium quantity of apples.
- E. There will be no changes in or movements along either curve.

12. Assume that Barbi paid \$5000 for tuition this semester, and that she tutors Math 221 at a rate of \$20 per hour - if she doesn't attend discussion section, this is her next most preferred activity. She is enrolled in 5 classes this semester, one of which is Economics 102. Last Friday she correctly calculated her opportunity cost of going to one of Byungyoon's discussion sections as

- A. \$0 because she had already paid her tuition.
- B. \$1000 because this is the average cost of a class for her.
- C. $\$1000/45 = \22.22 ; because Economics 102 will meet 45 times, this is the average cost of each class lecture / discussion.
- D. \$5020 because this is the total cost of her tuition plus her \$20 foregone tutoring wage.
- E. \$20 because this is value of her foregone tutoring wage.