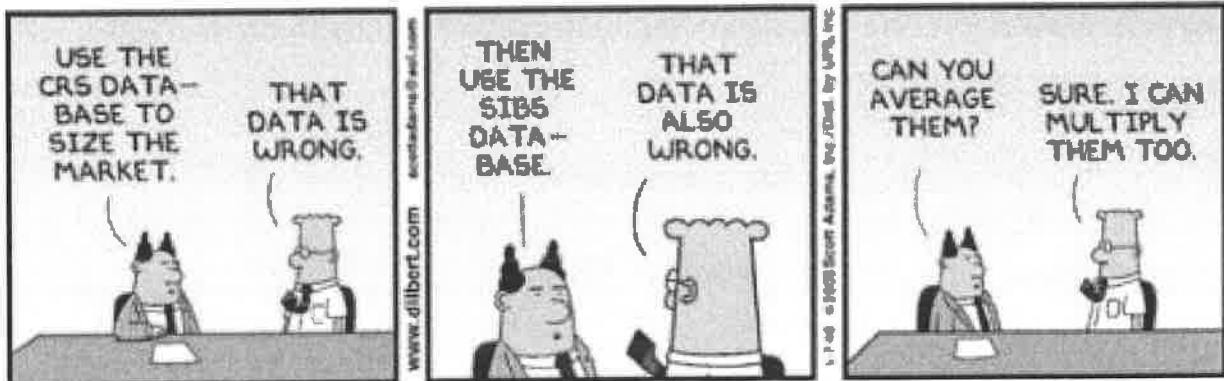


# Answers

## Exam 1 Microeconomics

The exam is 15 multiple-choice questions and 3 short answer questions. Write your answers on a separate sheet of paper. List your multiple choice answers in one column. Good luck!



1. Economics deals primarily with the concept of  
 a. scarcity.  
 b. money.  
 c. poverty.  
 d. banking.
2. When an economy is operating inside its production possibilities frontier, we know that  
 a. there are unused resources or inefficiencies in the economy.  
 b. all of the economy's resources are fully employed.  
 c. economic growth would have to occur in order for the economy to move to a point on the frontier.  
 d. in order to produce more of one good, the economy would have to give up some of the other good.

### Production Possibilities for Footville

Shoes	Socks
800	0
600	400
400	700
200	900

0	1000
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3. What is the opportunity cost to Footville of increasing the production of shoes from 200 to 400?
- a. 400 socks
  - b. 300 socks
  - c. 200 socks
  - d. 100 socks

4. Suppose there are only two people in the world. Each person's production possibilities frontier also represents his or her consumption possibilities when
- a. neither person faces trade-offs.
  - b. the frontiers are straight lines.
  - c. the frontiers are bowed out.
  - d. they choose not to trade with one another.

Assume that the farmer and the rancher can switch between producing meat and producing potatoes at a constant rate.

	Labor Hours Needed to Make 1 Pound of		Pounds Produced in 24 Hours	
	Meat	Potatoes	Meat	Potatoes
Farmer	6	4	4	6
Rancher	3	8	8	3

5. Which of the following combinations of meat and potatoes could the farmer produce in 24 hours?
- a. 1 pound of meat and 8 pounds of potatoes.
  - b. 2 pounds of meat and 2 pounds of potatoes.
  - c. 1 pounds of meat and 5 pounds of potatoes.
  - d. 3 pounds of meat and 2 pounds of potatoes.

6. Which of the following statements about comparative advantage is *not* true?

- a. Comparative advantage is determined by which person or group of persons can produce a given quantity of a good using the fewest resources.
- b. The principle of comparative advantage applies to countries as well as to individuals.
- c. Economists use the principle of comparative advantage to emphasize the potential benefits of free trade.

d. A country may have a comparative advantage in producing a good, even though it lacks an absolute advantage in producing that good.

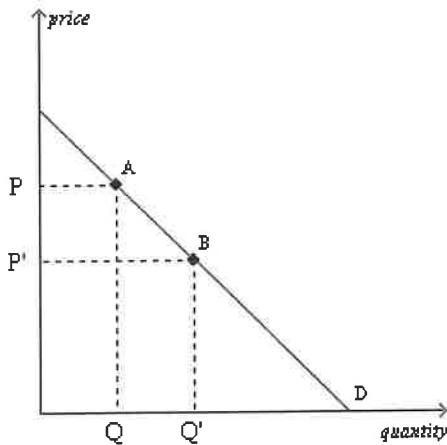
7. You are given market data that says when the price of pizza is \$4, the quantity demanded of pizza is 60 slices and the quantity demanded of cheese bread is 100 pieces. When the price of pizza is \$2, the quantity demanded of pizza is 80 slices and the quantity demanded of cheese bread is 70 pieces. Which good can you estimate the price elasticity of demand for? What is the PED?

$$\frac{\frac{2}{4}}{\frac{70-100}{100}} = \frac{\frac{2}{4}}{\frac{-30}{100}} = \frac{6}{14}$$

- a. Cheese bread; 2.333
- b. Cheese bread; 0.429
- c. Pizza; 2.333
- d. Pizza; 0.429
- e. PED can't be found for either

8. A group of buyers and sellers of a particular good or service is called a(n)

- a. coalition.
- b. economy.
- c. market.
- d. competition



9. The movement from point A to point B on the graph shows a(n)

- a. decrease in demand.
- b. increase in demand.
- c. decrease in quantity demanded.
- d. increase in quantity demanded.

	Bert's Quantity Demanded	Ernie's Quantity Demanded	Grover's Quantity Demanded	Oscar's Quantity Demanded
\$0.00	20	16	8	5
\$0.50	18	12	6	6

\$1.00	14	10	2	5
\$1.50	12	8	0	4
\$2.00	6	6	0	2
\$2.50	0	4	0	0

10. Whose demand does *not* obey the law of demand?

- a. Bert's
- b. Ernie's
- c. Grover's
- d. Oscar's

11. A likely example of substitute goods for most people would be

- a. peanut butter and jelly.
- b. cereal and oatmeal.
- c. televisions and subscriptions to cable television services.
- d. tennis balls and tennis rackets.

12. If the price of gasoline rises, when is the price elasticity of demand likely to be the highest?

- a. immediately after the price increases
- b. one month after the price increase
- c. three months after the price increase
- d. one year after the price increase

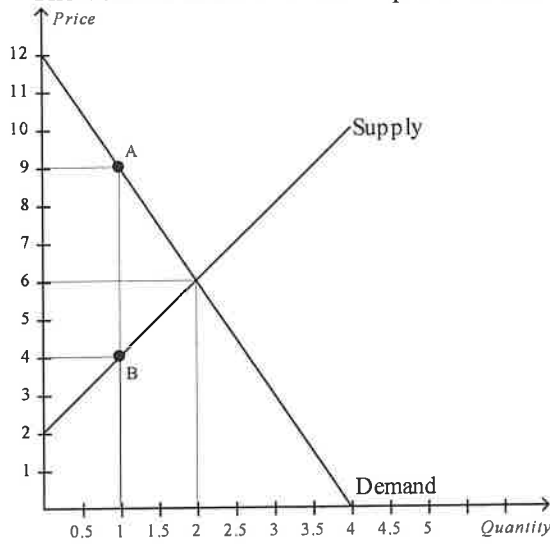
13. When can two countries gain from trading two goods?

- a. when the first country can only produce the first good and the second country can only produce the second good
- b. when the first country can produce both goods, but can only produce the second good at great cost, and the second country can produce both goods, but can only produce the first good at great cost
- c. when the first country is better at producing both goods and the second country is worse at producing both goods
- d. Two countries could gain from trading two goods under all of the above conditions.

14. Which of the following is likely to have the most price elastic demand?

- a. ice cream
- b. frozen yogurt
- c. vanilla ice cream
- d. Häagen-Dazs® vanilla bean ice cream

The vertical distance between points A and B represents a tax in the market.



- 15.)  Refer to Figure. The imposition of the tax causes the quantity sold to
- a. increase by 1 unit.
  - b. decrease by 1 unit.
  - c. increase by 2 units.
  - d. decrease by 2 units.

Short Answer Questions

1.) (8 points) When the Shaffers had a monthly income of \$4,500, they usually ate out 10 times a month. Now that the couple makes \$5,000 a month, they eat out 12 times a month. Compute the couple's income elasticity of demand using the midpoint method. Explain your answer. Is a restaurant meal a normal or inferior good to the couple?

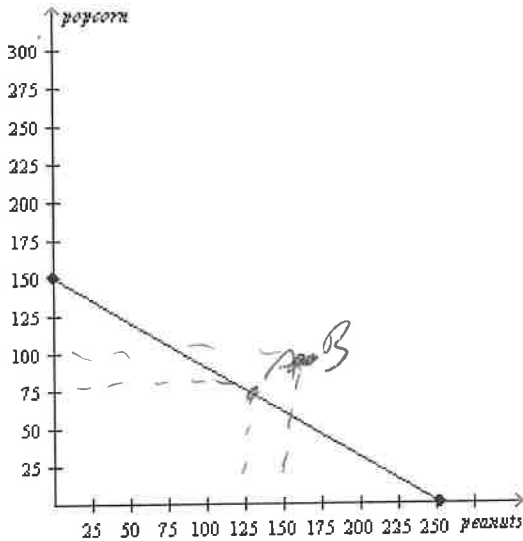
$$\frac{\% \Delta Q}{\% \Delta \text{Income}} = \frac{\frac{12-10}{11}}{\frac{5000-4500}{4750}} = \frac{\frac{2}{11}}{\frac{500}{4750}} = \frac{9500}{5500}$$

= 1.73

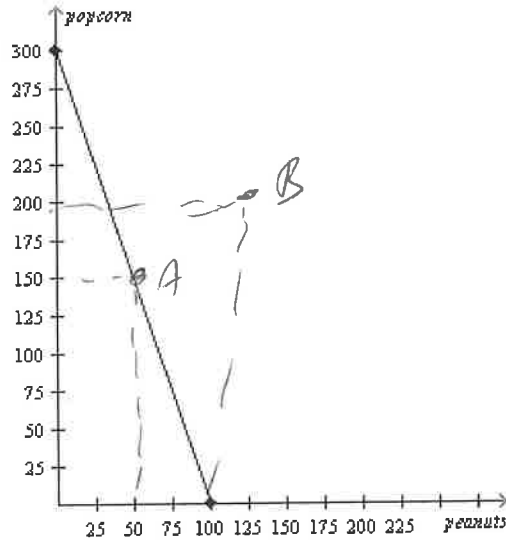
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- 2.) (16 points) The only two countries in the world, Alpha and Omega, face the following production possibilities frontiers.

Alpha's Production Possibilities Frontier



Omega's Production Possibilities Frontier



- Assume that each country decides to use half of its resources in the production of each good. Show these points on the graphs for each country as point A.
- If these countries choose not to trade, what would be the total world production of popcorn and peanuts?
- Now suppose that each country decides to specialize in the good in which each has a comparative advantage. By specializing, what is the total world production of each product now?
- If each country decides to trade 100 units of popcorn for 100 units of peanuts, show on the graphs the gain each country would receive from trade. Label these points B.

b) popcorn - 225, peanuts - 175

c) Alpha  $\frac{150}{250} = \frac{3}{5}$  popcorn

Omega  $\frac{250}{150} = \frac{5}{3}$  peanuts

Omega  $\frac{300}{100} = 3$  popcorn

Alpha  $\frac{100}{300} = \frac{1}{3}$  peanuts

Omega produces 300 popcorn } total production  
 Alpha produces 250 peanuts }

3.) (16 points) A survey indicated that chocolate is Americans' favorite ice-cream flavor. For each of the following, indicate the possible effects on demand, supply, or both as well as equilibrium price and quantity of chocolate ice cream.

- a. A severe drought in the Midwest causes dairy farmers to reduce the number of milk-producing cattle in their herds by a third. These dairy farmers supply cream that is used to manufacture chocolate ice cream.
- b. A new report by the American Medical Association reveals that chocolate does, in fact, have significant health benefits.
- c. The discovery of cheaper synthetic vanilla flavoring lowers the price of vanilla ice cream.
- d. New technology for mixing and freezing ice cream lowers manufacturers' costs of producing chocolate ice cream.

4.) (4 bonus points) Suppose the government wants to tax wealthier people to pay for infrastructure. Give an example of a good that they could tax to achieve that. Explain the tax incidence for this good using elasticities.

