

Name \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) In order to know whether a country has a comparative advantage in the production of one particular product we need information on at least \_\_\_\_\_ unit labor requirements 1) \_\_\_\_\_  
 A) five                      B) four                      C) two                      D) three                      E) one

- 2) Given the following information: 2) \_\_\_\_\_

<b>Unit Labor Requirements</b>		
	<b>Cloth</b>	<b>Widgets</b>
Home	10	20
Foreign	60	30

- A) Home has a comparative advantage in widgets.  
 B) Neither country has a comparative advantage.  
 C) Home has a comparative advantage in cloth.  
 D) Foreign has a comparative advantage in cloth.  
 E) Home has a comparative advantage in both products.
- 3) If the Home economy suffered a meltdown, and the Unit Labor Requirements in each of the products tripled (changed to 30 for cloth and 60 for widgets) then home should 3) \_\_\_\_\_  
 A) export widgets.  
 B) export cloth.  
 C) export and import nothing.  
 D) export both and import nothing.  
 E) All of the above.
- 4) If wages were to double in Home, then Home should: 4) \_\_\_\_\_  
 A) export widgets.  
 B) export both and import nothing.  
 C) export and import nothing.  
 D) export cloth.  
 E) All of the above.
- 5) Given the following information: 5) \_\_\_\_\_

<b>Number of Units Produced by one Unit of Labor</b>		
	<b>Cloth</b>	<b>Widgets</b>
Home	10	20
Foreign	60	30

- A) Neither country has a comparative advantage.  
 B) Home has a comparative advantage in cloth.  
 C) Home has a comparative advantage in both products.  
 D) Foreign has a comparative advantage in cloth.  
 E) Foreign has a comparative advantage in widgets.

- 6) If the production possibilities frontier of one the trade partners ("Country A") is bowed out (concave to the origin), then increased specialization in production by that country will \_\_\_\_\_ 6) \_\_\_\_\_
- A) Decrease the economic welfare of Country A.
  - B) Increase the economic welfare of both countries.
  - C) Decrease the economic welfare of Country B.
  - D) Increase the economic welfare of only Country A.
  - E) None of the above.
- 7) If the world terms of trade for a country are somewhere between the domestic cost ratio of H and that of F, then \_\_\_\_\_ 7) \_\_\_\_\_
- A) country H but not country F will gain from trade.
  - B) country H and country F will both gain from trade.
  - C) neither country H nor F will gain from trade.
  - D) only the country whose government subsidizes its exports will gain.
  - E) None of the above.
- 8) The earliest statement of the principle of comparative advantage is associated with \_\_\_\_\_ 8) \_\_\_\_\_
- A) David Hume.
  - B) Bertil Ohlin.
  - C) Adam Smith.
  - D) Eli Heckscher.
  - E) David Ricardo.
- 9) In a two-country, two-product world, the statement "Germany enjoys a comparative advantage over France in autos relative to ships" is equivalent to \_\_\_\_\_ 9) \_\_\_\_\_
- A) Germany having a comparative advantage over France in autos and ships.
  - B) France having no comparative advantage over Germany.
  - C) France having a comparative disadvantage compared to Germany in autos and ships.
  - D) France having a comparative advantage over Germany in ships.
  - E) None of the above.
- 10) If two countries in Autarky (not engaged in international trade) begin trading with other in a manner consistent with the Ricardian model of comparative advantage, then \_\_\_\_\_ 10) \_\_\_\_\_
- A) The amount of labor required to produce one unit of imports will decrease only in the relatively capital abundant country.
  - B) The amount of labor required to produce one unit of both products will decrease in both countries.
  - C) The amount of labor required to produce one unit of imports will decrease in both countries.
  - D) The amount of labor required to produce one unit of imports will decrease only in the relatively labor abundant country
  - E) None of the above.
- 11) Assume output prices are fixed. In the 2-factor, 2 good Heckscher-Ohlin model, an influx of workers from across the border would \_\_\_\_\_ 11) \_\_\_\_\_
- A) shift the production possibility curve outward, and increase the production of both goods.
  - B) shift the production possibility curve outward and decrease the production of the capital-intensive product.
  - C) shift the production possibility curve outward and decrease the production of the labor-intensive product.
  - D) move the point of production along the production possibility curve.
  - E) None of the above.

- 12) In the 2-factor, 2 good Heckscher-Ohlin model, an influx of workers from across the border would 12) \_\_\_\_\_
- A) move the point of production along the production possibility curve.
  - B) shift the production possibility curve outward and decrease the production of the labor-intensive product.
  - C) shift the production possibility curve outward, and increase the production of both goods.
  - D) shift the production possibility curve outward and decrease the production of the capital-intensive product.
  - E) None of the above.

- 13) The Leontief Paradox 13) \_\_\_\_\_
- A) failed to support the validity of the Ricardian theory.
  - B) supported the validity of the Heckscher-Ohlin model.
  - C) proved that the U.S. economy is different from all others.
  - D) failed to support the validity of the Heckscher-Ohlin model.
  - E) supported the validity of the Ricardian theory of comparative advantage.

- 14) Consider the following data: 14) \_\_\_\_\_

Factor Endowments	Countries	
	A	B
Labor Force	45	20
Capital Stock	15	10

If good S is capital intensive, then following the Heckscher-Ohlin Theory,

- A) country A will export good S.
  - B) country B will export good S.
  - C) both countries will export good S.
  - D) trade will not occur between these two countries.
  - E) Insufficient information is given.
- 15) Consider the following data: 15) \_\_\_\_\_

Factor Endowments	Countries	
	A	B
Labor Force	45	20
Capital Stock	15	10

If good S is capital intensive and Country B is very much richer than Country A, then following the Heckscher-Ohlin Theory, then:

- A) country A will export good S.
- B) country B will export good S.
- C) both countries will export good S.
- D) trade will not occur between these two countries.
- E) insufficient information is given.

- 16) Starting from autarky with Heckscher-Ohlin model, if Country H is relatively labor abundant, then once trade begins 16) \_\_\_\_\_
- A) wages should fall and rents should rise in H.
  - B) wages should rise and rents should fall in H.
  - C) wages and rents should fall in H
  - D) wages and rents should rise in H
  - E) None of the above.
- 17) The concept "terms of trade" means 17) \_\_\_\_\_
- A) the price conditions bargained for in international markets.
  - B) the quantities of imports received in free trade.
  - C) the price of a country's exports divided by the price of its imports.
  - D) the amount of exports sold by a country.
  - E) None of the above.
- 18) If the U.S. (a large country) imposes a tariff on its imported good, this will tend to 18) \_\_\_\_\_
- A) improve the terms of trade of all countries.
  - B) cause a deterioration of U.S. terms of trade.
  - C) raise the world price of the good imported by the United States.
  - D) have no effect on terms of trade.
  - E) improve the terms of trade of the United States.
- 19) If the economy is producing at point a on its production possibility frontier, then 19) \_\_\_\_\_
- A) all of the country's workers are specialized in one product.
  - B) all of the county's capital is used for one product.
  - C) all of its capital is used, but not efficiently.
  - D) all of the county's workers are employed.
  - E) None of the above.
- 20) During the 19th Century, economic growth of the major trading countries was biased toward manufactures and away from food. The less developed countries of that time were net exporters of food. From this information, we would expect to have observed 20) \_\_\_\_\_
- A) a decrease in the relative price of food.
  - B) improving terms of trade for the less developed countries.
  - C) falling terms of trade for the less developed countries.
  - D) no change at all in the terms of trade of the less developed countries.
  - E) None of the above.

## Answer Key

Testname: 330F08MIDTERM

- 1) B
- 2) C
- 3) B
- 4) D
- 5) D
- 6) B
- 7) B
- 8) E
- 9) D
- 10) C
- 11) B
- 12) D
- 13) D
- 14) B
- 15) B
- 16) B
- 17) C
- 18) E
- 19) D
- 20) B

1. Consider the following table of labor coefficients:

	Hours of Labor to Make One Unit of:	
	Apples	Bananas
England	1 hour	2 hours
France	3 hours	4 hours

Each cell tells how many hours of labor it takes to make one unit of the good in questions. England had 12 units of labor, and so does France.

- A. (3 points) For which goods does England have an absolute advantage. Explain your answer. **England has an absolute advantage in both goods. It takes fewer hours in England to make an apple than it does in France. The same is true for a banana.**
- B. (3 points) Which country has a comparative advantage in bananas? Explain your answer. **The opportunity cost of a banana in England is 2 apples, but it is only 4/3 of an apple in France. So France has a comparative advantage in bananas.**
- C. (4 points) The price of apples is \$1 and the price of bananas is \$1.60. What is the GDP in England and what is the GDP in France? Explain your answer. **Since  $4/3 < 1.6 < 2$ , both countries are completely specialized. Hence England makes 12 apples, and its GDP is \$12. France makes 3 bananas, and its GDP is \$4.8**

2. Let the units cost function for two different goods be given by

$$C_1(w, r; 1) = 2w + r$$

and

$$C_2(w, r; 1) = w + 2r$$

where  $w$  is the wage rate and  $r$  is the rentals rate on land.

- A. (3 points) Which industry is labor-intensive? Explain your answer. **The first activity uses two workers for each piece of land, and the second activity uses one worker for every two pieces of land. So the first one is labor-intensive.**

- B. (3 points) The price of good 1 is 15 euros and the price of good 2 is also 15 euros. Solve for the wage rate and the rentals rate. Show your work.  **$15 = 2w + r$  and also  $15 = w + 2r$ . So  $r = 5$  and  $w = 5$ .**
- C. (4 points) The price of the first good rises by 10%. By how many percent does the wage rate change? By how many percent does the rentals rate change? Show your work. **Now  $16.5 = 2w + r$  and also  $15 = w + 2r$ . So  $r = 4.5$  and  $w = 6$ . Hence the wage went up by 20% and the rentals rate fell by 10%.**
3. There are 100 workers in the home country. Capital in computers is a fixed factor, land in food is a fixed factor, and only labor is mobile. The marginal physical product of a worker in food is:

$$MPL_f = 100 - L_f$$

where  $L_f$  is the number of workers in the food sector. The marginal physical product of workers in computers is

$$MPL_c = 100 - L_c$$

where now  $L_c$  is the number of workers in the computer sector. The price of a unit of food is \$5, and the price of a computer is \$8.

- A. How many workers will be in the food industry, and how many will be in the computer industry? Show your work.

$$\begin{aligned} w &= 5MPL_f = 500 - 5L_f = 8MPL_c = 800 - 8L_c \\ 500 - 5L_f &= 800 - 8(100 - L_f) \\ 500 - 5L_f &= 8L_f \\ L_f &= \frac{500}{13} = 38.46 \\ L_c &= 61.54 \end{aligned}$$

- B. The price of computers goes up to \$9 because of increased demand for exports. How much does the wage rate rise?

**In the first case, the wage rate was**

$$w = 500 - 5L_f = 500 - 5 * \frac{500}{13} = 500 * \frac{8}{13}$$

**Now we have**

$$\begin{aligned} w &= 5MPL_f = 500 - 5L_f = 9MPL_c = 900 - 9L_c \\ 500 - 5L_f &= 900 - 9(100 - L_f) \end{aligned}$$

$$L_f = \frac{500}{14} = 35.71$$

So now the wage is

$$w = 500 - 5L_f = 500 - 5 * \frac{500}{14} = 500 * \frac{9}{14}$$