

First midterm. Look over the whole test before you begin. Good luck!

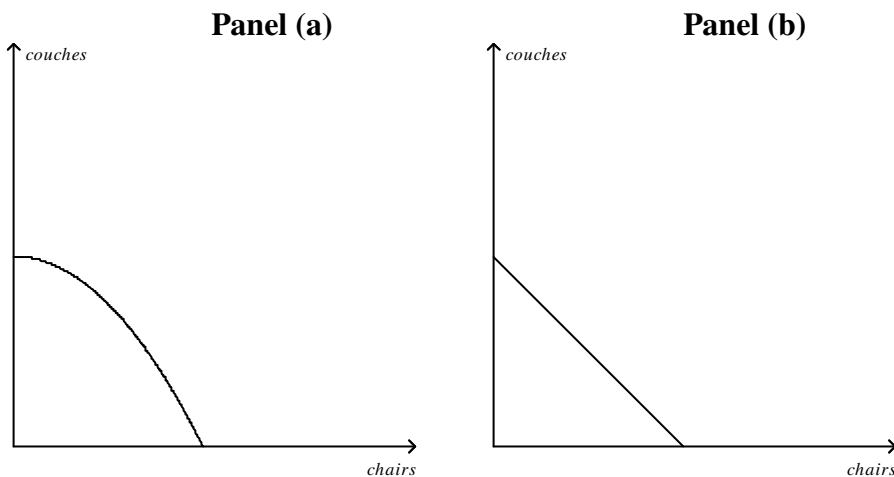
The exam has 24 multiple choice questions at 5 pts each, and two longer questions for 25 points.

1. The word “economy” comes from the Greek word *oikonomos*, which means
 - a. “environment.”
 - b. “production.”
 - c. “one who manages a household.”
 - d. “one who makes decisions.”

2. When computing the opportunity cost of attending a concert you should include
 - a. the price you pay for the ticket and the value of your best alternative activity.
 - b. the price you pay for the ticket, but not the value of your best alternative activity
 - c. the value of your best alternative activity, but not the price you pay for the ticket.
 - d. neither the price of the ticket nor the value of your best alternative activity.

3. In the circular-flow diagram, which of the following is true?
 - a. firms are buyers in the markets for goods and services.
 - b. households are sellers in the markets for the factors of production.
 - c. firms are sellers in the markets for factors of production and in the markets for goods and services.
 - d. households are buyers in the markets for factors of production
 - e. None of the above.

4. Look at these two PPFs.



The opportunity cost of producing chairs is constant in

- a. Panel (a).
- b. Panel (b).
- c. both Panel (a) and Panel (b).
- d. neither Panel (a) nor Panel (b).
- e. I cannot infer anything about opportunity costs from these figures.

5. Absolute advantage is found by comparing different producers'

- a. opportunity costs.
- b. payments to land, labor, and capital.
- c. input requirements per unit of output.
- d. locational and logistical circumstances.
- e. none of the above

Table for questions 6-8

Two countries, Andia and Zardia, can switch between producing wheat and producing beef at a constant rate. First fill out the table, then answer the questions.

| | Output per hour of labor | | Opportunity cost of | |
|--------|--------------------------|---------------|---------------------|------|
| | Units of Wheat | Units of Beef | Wheat | Beef |
| Andia | 3 | 5 | | |
| Zardia | 6 | 4 | | |

6. What are the countries' opportunity costs of producing wheat?

- a. For Andia, 1/3; for Zardia, 1/6
- b. For Andia, 1/6; for Zardia, 1/3
- c. For Andia, 2/3; for Zardia, 5/3
- d. For Andia, 5/3; for Zardia, 2/3
- e. For Andia, 5/3; for Zardia, 3/5

7. Who has an absolute advantage in what?

- a. Andia has an absolute advantage in beef, Zardia has an absolute advantage in wheat.
- b. Andia has an absolute advantage in wheat, Zardia has an absolute advantage in beef.
- c. Andia has an absolute advantage in both.
- d. Zardia has an absolute advantage in both.
- e. Neither country has an absolute advantage in anything.

8. Who has a comparative advantage in what?

- a. Andia has a comparative advantage in beef, Zardia has a comparative advantage in wheat.
- b. Andia has a comparative advantage in wheat, Zardia has a comparative advantage in beef.
- c. Andia has a comparative advantage in both.
- d. Zardia has a comparative advantage in both.
- e. Neither country has a comparative advantage in anything.

Table for questions 9-13. Assume that England and Spain can switch between producing cheese and producing bread at a constant rate.

| | Units produced from one hour of labor | | Opportunity cost of | |
|---------|---------------------------------------|-------|---------------------|-----------|
| | Cheese | Bread | Cheese | Bread |
| England | 1 | 1/4 | 1/4 breads | 4 cheeses |
| Spain | 1/4 | 1/8 | 1/2 breads | 2 cheeses |

9. We could use the information in the table to draw a production possibilities frontier for England and a second production possibilities frontier for Spain. If we were to do this, measuring *cheese* along the horizontal axis, then

- the slope of England's production possibilities frontier would be -4 and the slope of Spain's production possibilities frontier would be -2.
- the slope of England's production possibilities frontier would be -1 and the slope of Spain's production possibilities frontier would be -1/4.
- the slope of England's production possibilities frontier would be -1/4 and the slope of Spain's production possibilities frontier would be -1/2.
- the slope of England's production possibilities frontier would be -1/2 and the slope of Spain's production possibilities frontier would be -1/4.
- None of the above

10. England has an absolute advantage in the production of

- cheese and Spain has an absolute advantage in the production of bread.
- bread and Spain has an absolute advantage in the production of cheese.
- both goods and Spain has an absolute advantage in the production of neither good.
- neither good and Spain has an absolute advantage in the production of both goods.

11. England should specialize in the production of

- bread and Spain should specialize in the production of cheese.
- cheese and Spain should specialize in the production of bread.
- both goods and Spain should specialize in the production of neither good.
- neither good and Spain should specialize in the production of both goods.

12. Which of the following deals will allow *both* England and Spain to gain from trade?

- Spain gives England 1 bread for 3 cheeses; thus each cheese costs Spain 1/3 of a bread.
- Spain gives England 1 bread for 5 cheese; thus each cheese costs Spain 1/5 of a bread.
- Spain gives England 1 bread for 4 cheeses; thus each cheese costs Spain 1/4 of a bread.
- England gives Spain 1 bread for 3 cheeses; thus each cheese costs England 1/3 of a bread.
- None of the above.

13. If the Spanish Armada had succeeded and Spain had conquered England, what would be the shape of the PPF for the United Kingdom of England and Spain, measuring *bread* along the horizontal axis?

- a straight line, with a slope depending on the relative labor supplies from the two countries
- a straight line, with a slope that averages the slopes of the two separate PPFs
- bent-out, with a kink at the point where the horizontal axis is equal to the number of hours of labor in England
- bent-out, with a kink at the point where the horizontal axis is equal to 1/8 times the total number of hours of labor in Spain
- none of the above

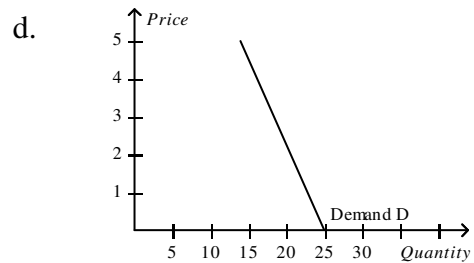
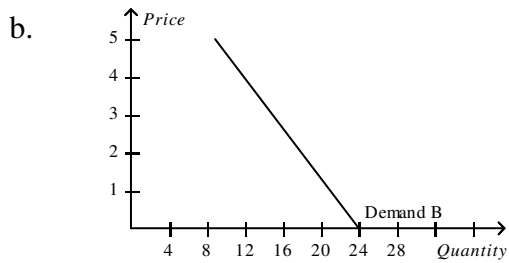
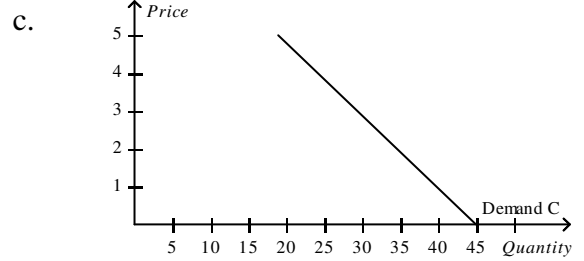
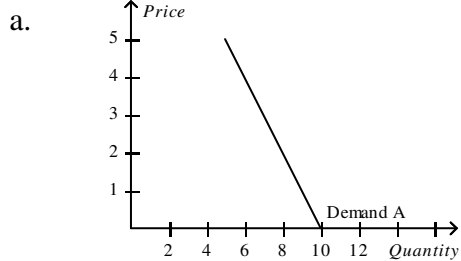
14. A movement upward and to the left along a demand curve is called

- a. an increase in demand.
- b. a decrease in demand.
- c. a decrease in quantity demanded.
- d. an increase in quantity demanded.
- e. non of the above

15.

| Price | Quantity Demanded by Michelle | Quantity Demanded by Laura | Quantity Demanded by Hillary |
|-------|-------------------------------|----------------------------|------------------------------|
| \$5 | 5 | 4 | 11 |
| \$4 | 6 | 6 | 13 |
| \$3 | 7 | 8 | 15 |
| \$2 | 8 | 10 | 17 |
| \$1 | 9 | 12 | 19 |
| \$0 | 10 | 14 | 21 |

Assuming these are the only buyers, which of the following is the market demand curve?



Information for questions 16 and 17. Suppose total income in a community, denoted I , is equal to 10 units.

For good A, $Q^S = 12 + 2P$ $Q^D = 14 + I - 4P$

For good B, $Q^S = 7 + 5P$ $Q^D = 40 - 3I - 5P$

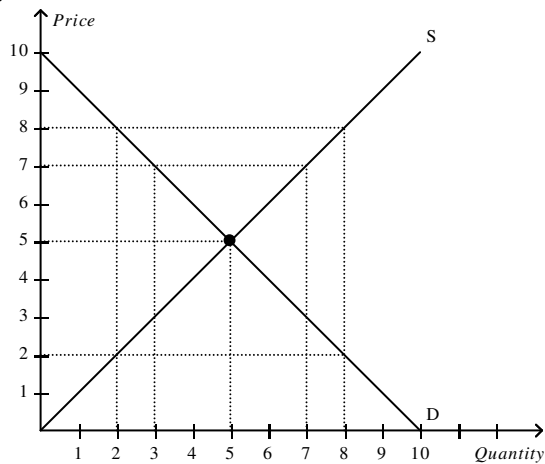
16. What are the equilibrium price and quantity of good A?

- $P^* = 4, Q^* = 18$
- $P^* = 2, Q^* = 16$
- $P^* = 2, Q^* = 12$
- $P^* = 6, Q^* = 10$
- I do not have enough information to answer this question

17. Given the information, consider whether each good is a normal good or an inferior good.

- Both are normal.
- Both are inferior.
- A is inferior, B is normal.
- A is normal, B is inferior.
- I do not have enough information to say whether to goods are normal or inferior.

18.



At a price of

- \$2, there is a surplus of 6 units.
- \$5, there is a surplus of 25 units.
- \$5, there is a shortage of \$25.
- \$7, there is a surplus of 4 units.
- None of the above

19. What will happen to the equilibrium price of new textbooks if more students attend college, paper becomes cheaper, textbook authors accept lower royalties, and fewer used textbooks are sold?

- Price will rise, and the effect on quantity is ambiguous.
- Price will fall, and the effect on quantity is ambiguous.
- Quantity will fall, and the effect on price is ambiguous.
- Quantity will rise, and the effect on price is ambiguous.
- Price will fall and quantity will rise.

20. What will happen to the equilibrium price and quantity of new cars if the price of gasoline rises, the price of steel rises, public transportation becomes cheaper and more comfortable, and auto-workers negotiate higher wages?

- Price will fall, and the effect on quantity is ambiguous.
- Price will rise, and the effect on quantity is ambiguous.
- Quantity will fall, and the effect on price is ambiguous.
- Quantity will rise, and the effect on price is ambiguous.
- Price will fall and quantity will rise.

21. For a particular good, a 2 percent increase in price causes a 12 percent decrease in quantity demanded. Which of the following statements is most likely applicable to this good?
- There are no close substitutes for this good.
 - The good is a luxury.
 - The market for the good is broadly defined.
 - The relevant time horizon is short.
22. When the price of a good is \$5, the quantity demanded is 100 units per month; when the price is \$7, the quantity demanded is 80 units per month. Using the midpoint method, the price elasticity of demand is:
- $3/2$
 - $2/3$
 - 2
 - 3
 - None of the above
23. Suppose a producer is able to separate customers into two groups, one having an inelastic demand and the other having an elastic demand. If the producer's objective is to increase total revenue, she should
- increase the price charged to customers with the elastic demand and decrease the price charged to customers with the inelastic demand.
 - decrease the price charged to customers with the elastic demand and increase the price charged to customers with the inelastic demand.
 - decrease the price to both groups of customers.
 - increase the price for both groups of customers.
24. Which of the following observations would be consistent with the imposition of a binding price ceiling on a market? After the price ceiling becomes effective,
- a smaller quantity of the good is bought and sold.
 - a smaller quantity of the good is demanded.
 - a larger quantity of the good is supplied.
 - the price rises above the previous equilibrium.
 - none of the above

Written questions.

I) 10 pts. In a few sentences, explain how two goods that are *complements* are different from two goods that are *substitutes*. Use full sentences with *no errors in spelling or grammar*. You might want to do a first draft on the scratch paper.

II) 15 pts. The kingdom of Caria produces two goods, wheat and olive oil. In the kingdom there are 1,000 acres of land and 1,000 peasants. It takes exactly one peasant to farm one acre of land. Half the land is flat; the other half is mountainous. Flat land can produce two units of olive oil, or three units of wheat, per acre. Mountainous land can produce two units of olive oil or one unit of wheat, per acre.

a) On the graph below, draw the PPF for Caria with a *solid* line.

b) Suppose the neighboring kingdom of Lydia offers to give Caria oil in exchange for wheat, specifically 2 units of oil for each unit of wheat. On the graph above, draw the various combinations of oil and wheat Caria could consume if it takes this deal, with a *dotted* line.