1. Consider the following supply and demand curves, $D = 35 - 2P \quad S = 4P - 1$. The equilibrium price and quantity are given by

    a. P = 7, Q = 21
    b. P = 8, Q = 31
    c. P = 4, Q = 15
    d. P = 6, Q = 23
    e. P = 5, Q = 25

2. Demand now increases to D = 47 - 2P. The equilibrium price and quantity are given by
    a. P = 9, Q = 29   d. P = 5, Q = 37
    b. P = 8, Q = 31   e. P = 10, Q = 27
    c. P = 7, Q = 27

3. With demand at the higher level of D = 47 - 2P, supply changes to S = - 2 + 5P. The equilibrium price and quantity are given by
    a. P = 8, Q = 38   d. P = 8, Q = 31
    b. P = 9, Q = 29   e. P = 7, Q = 33
    c. P = 6, Q = 35

4. Opportunity cost is best described as
    a. the value of the time needed to make a choice.
    b. the most cost efficient way to produce an opportunity.
    c. the cost of discovering an opportunity.
    d. the value of the alternative opportunity given up when a choice is made.
    e. the cost of the inputs in a production process.

5. A construction firm builds houses and also apartments. The city council passes an ordinance freezing rents on all apartments in the city at their current levels and also imposes a low ceiling on the price per square foot that may be charged as rent on new apartments. Which of the following statements is correct?
    a. The cost of building apartments will rise.
    b. The opportunity cost of building houses will rise.
    c. The opportunity cost of building houses will fall.
    d. The cost of building houses will fall.
    e. The firm will build more apartments.

6. If a worker can dig 12 postholes per hour and 4 drain holes per hour, what is the opportunity cost of digging 18 postholes?
    a. 3 drain holes
    b. 4 drain holes
    c. 6 drain holes
    d. 1.5 postholes
    e. 1/3 posthole

Consider the following data on glove and mitten production.

Gloves	Mittens
0	120
10	110
20	98
30	84
40	68
50	50
60	30
70	0

7. What is the opportunity cost of 18 more mittens when the firm is already producing 50?
   a. 6 gloves
   b. 14 gloves
   c. 9 gloves
   d. 12 gloves
   e. 10 gloves

8. What is the opportunity cost of 10 more gloves if the firm is already producing 30?
   a. 12 mittens
   b. 8 mittens
   c. 16 mittens
   d. 18 mittens
   e. 10 mittens

9. If it costs 20 shekels to produce a pound of chicken in Israel and 2,400 shekels to produce a small diamond, what is the opportunity cost of producing 12,000 more pounds of chicken?
   a. 144,000 diamonds
   b. 4 diamonds
   c. 100 diamonds
   d. 1,440,000 diamonds
   e. 50 diamonds

10. Which of the following is a reasonable method to construct the production possibility set, which is the set of all output combinations that are *producible* for a given set of inputs.
   a. pick a level of the two outputs and then find all levels of inputs that are able to produce this specific output combination.
   b. pick a level of the two outputs and hold this fixed, pick a level of one of the two inputs and then find the minimum level of the other input that is required to produce the chosen output combination given the fixed level of the first input, and then repeat for other levels of the first input.
   c. set a level for all inputs, pick a level of one of the two outputs, find the maximum level of the other output for this level of the first output, and then repeat for other levels of the first output.
   d. set a level for all inputs, pick a level of one of the two outputs, find all feasible levels of the other output for this level of the first output, and then repeat for other levels of the first output.

11. Which of the following is a correct statement concerning expendables, capital, and capital services?
    a. Expendable factors of production are completely used up or consumed during a single production period. Capital is machinery, buildings and equipment. Capital services are the flows of financial assets and other services provided by the banking sector.
    b. Expendable factors of production are inputs that are purchased outside the firm. Capital is machinery, buildings and equipment along with human capital. Capital services are the flows of financial assets and other services provided by the banking sector.
    c. Expendable factors of production are inputs that are purchased outside the firm. Capital is a stock that is not used up during a single production period, and provides services over time. Capital services are the flow of productive services that can be obtained from a given capital stock during a production period.
    d. Expendable factors of production are completely used up or consumed during a single production period. Capital is a stock that is not used up during a single production period, and provides services over time. Capital services are the flow of productive services that can be obtained from a given capital stock during a production period.

12. Which of the following is a capital service?
    a. Lease of a warehouse for 6 months
    b. Truck
    c. Forklift operator
    d. Gasoline
    e. Shipping tape

13. Under market socialism, resources are allocated by
    a. command and owned privately.
    b. the market and owned by the state.
    c. the market and owned privately.
    d. command and owned by the state.
    e. tradition and owned by all.

14. In economics we say that a technology is a description of the set of outputs that can be produced by a given set of factors of production using a given method or process. When is a technology being utilized efficiently?
    a. When the firm produces a large amount of output.
    b. When the output of one product cannot be increased without reducing the output of another product, holding all inputs fixed.
    c. When the use of one input is minimized while holding the levels of all outputs and other inputs fixed.
    d. When the most recent advances in engineering are applied.
    e. Both b and c are correct.

15. Economics is the study of
    a. how to make money in financial markets.
    b. how business firms make their choices.
    c. how to allocate limited resources to satisfy unlimited wants.
    d. how to allocate unlimited resources to satisfy unlimited wants.
    e. how to minimize the use of money.

16. Why is the boundary of the production possibility frontier usually concave to the origin?
    a. Some inputs are better suited to some uses.
    b. Machines are inefficient when used to produce two products.
    c. Some allocated inputs may be shared between uses.
    d. There is usually a one-for-one trade off in resources used in production.
    e. Both a and c are correct.

The following graph should be used for questions 17, 18 and 19.

Production Possibility Set
Pies and Cakes
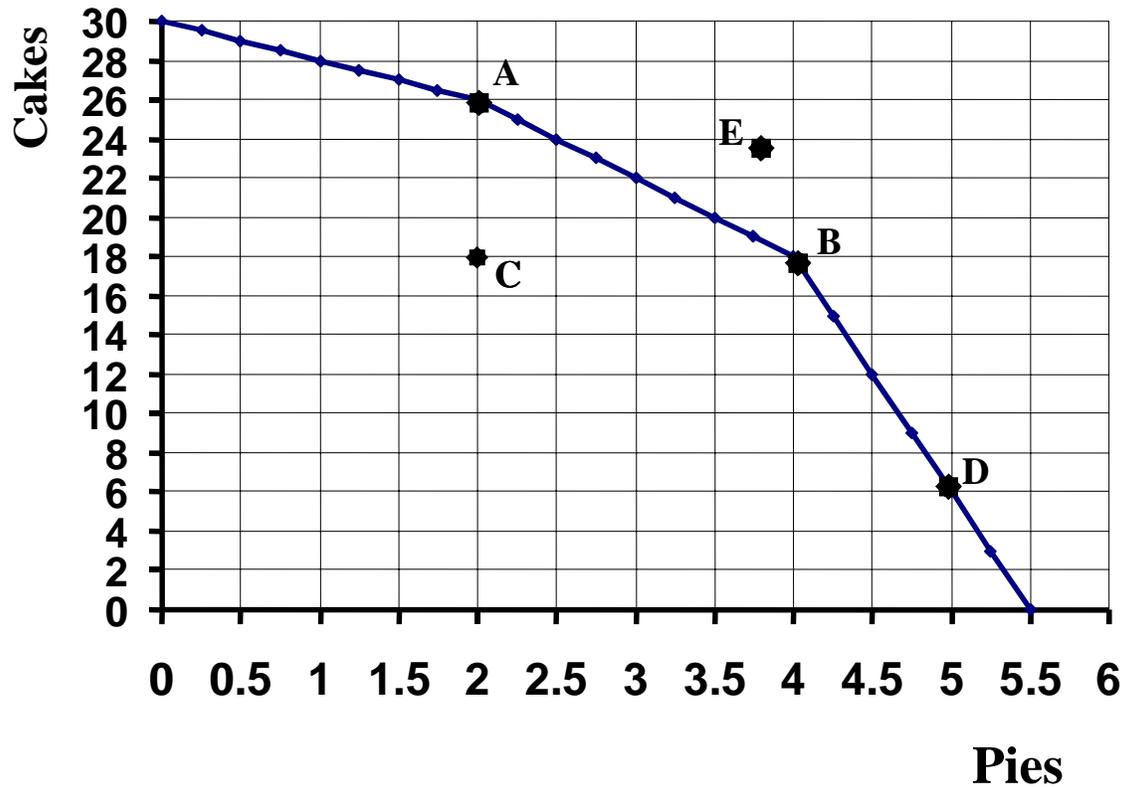
17. Which point is inefficient?
   A.
   B.
   C.
   D.
   E.

18. At what point does the firm's tradeoff of cakes for pies change from 4 to 2?
   A.
   B.
   C.
   D.
   E.

19. When the firm is producing between 4 and 5 pies, what is the opportunity cost of one more pie?
   a.   2 cakes
   b.   6 cakes
   c.   4 cakes
   d.   12 cakes
   e.   6 pies

For questions 20 and 21, consider the graphs on the next page. In all cases the initial situation is S_0 and D_0.

20. Which graph is consistent with the following story? Firms *producing* screws produce both wood screws and metal screws. The diagram represents the supply and demand for wood screws. There is a fall in the price of metal screws.

A.
B.
C.
D.

21. Which graph is consistent with the following story? Firms producing steel also produce a significant amount of air pollution. The diagram represents the supply and demand for steel. The government passes a new law which requires firms to install filtering equipment which lowers the amount of pollution emitted.

A.
B.
C.
D.

Huck Finn and his friend Jim live on a raft in the middle of the river. The following table represents their output in a day of work.

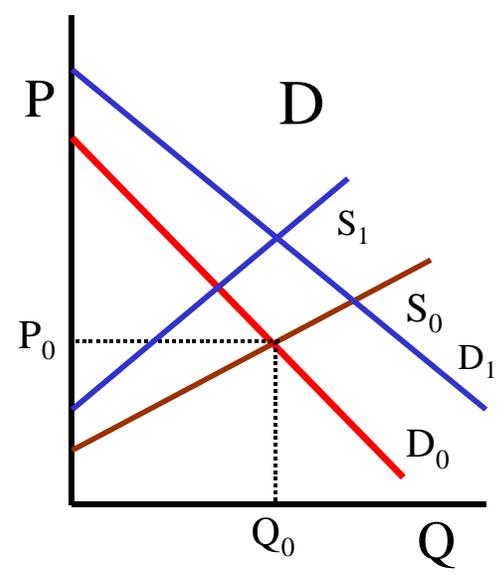|	Fish	Crawdads
Huck	30	90
Jim	25	50

22. Which of the following statements is true?
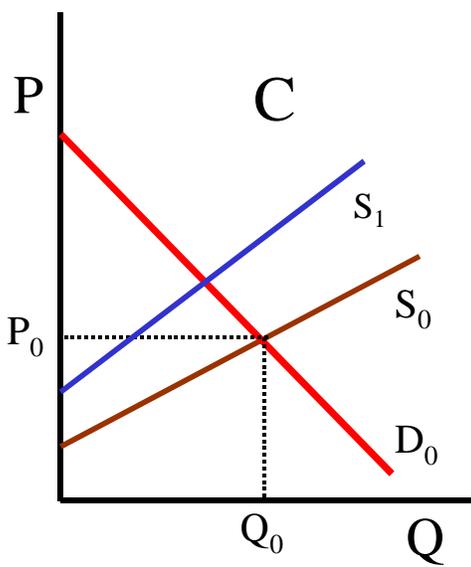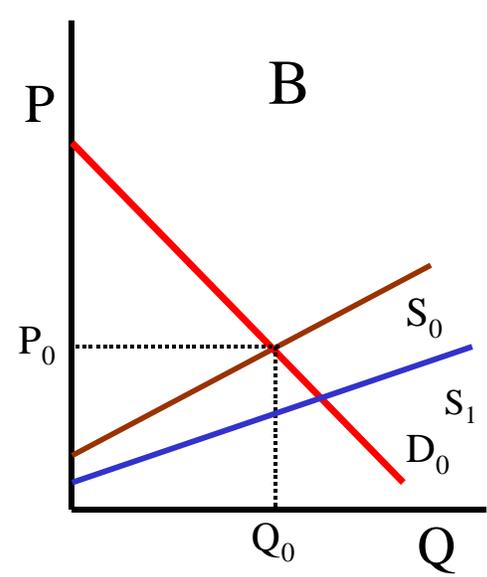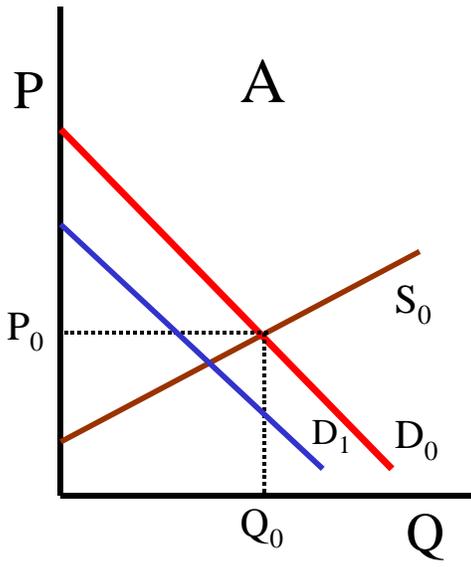   a. Jim has an absolute advantage in both products and a comparative advantage in fishing.
   b. Huck has an absolute advantage in fishing and a comparative advantage in fishing.
   c. Huck has an absolute advantage in fishing while Jim has a comparative advantage in fishing.
   d. Samuel Clemens has a comparative disadvantage in both products.
   e. Huck has a comparative advantage in fishing and a comparative advantage in crawdads.

The Scarecrow and the Tinman live in the land of OZ. The following table represents their cost of production for felling trees and scaring birds. The costs are per tree and per bird.

|	$/Tree	$/Bird
Scarecrow	20	5
Tinman	30	10

23. Which of the following statement is true?
   a. The Tinman can fell trees at a lower dollar cost than the Scarecrow.
   b. The rate of substitution for the Scarecrow is 1 bird for 4 trees.
   c. The Tinman has a comparative advantage in scaring birds.
   d. The Tinman must give up 60 birds in order to fell 20 trees.
   e. Both c and d are correct.

A

P

S_0

P_0

D_1 D_0

Q_0 Q

B

P

S_0

P_0

S_1

D_0

Q_0 Q

C

P

S_1

S_0

P_0

D_0

Q_0 Q

D

P

S_1

S_0

P_0

D_1

D_0

Q_0 Q

24. Consider the following supply-demand graph for compact disks per year for Jerry Kowalski. Initially demand is D_1.

Market For Compact Disks
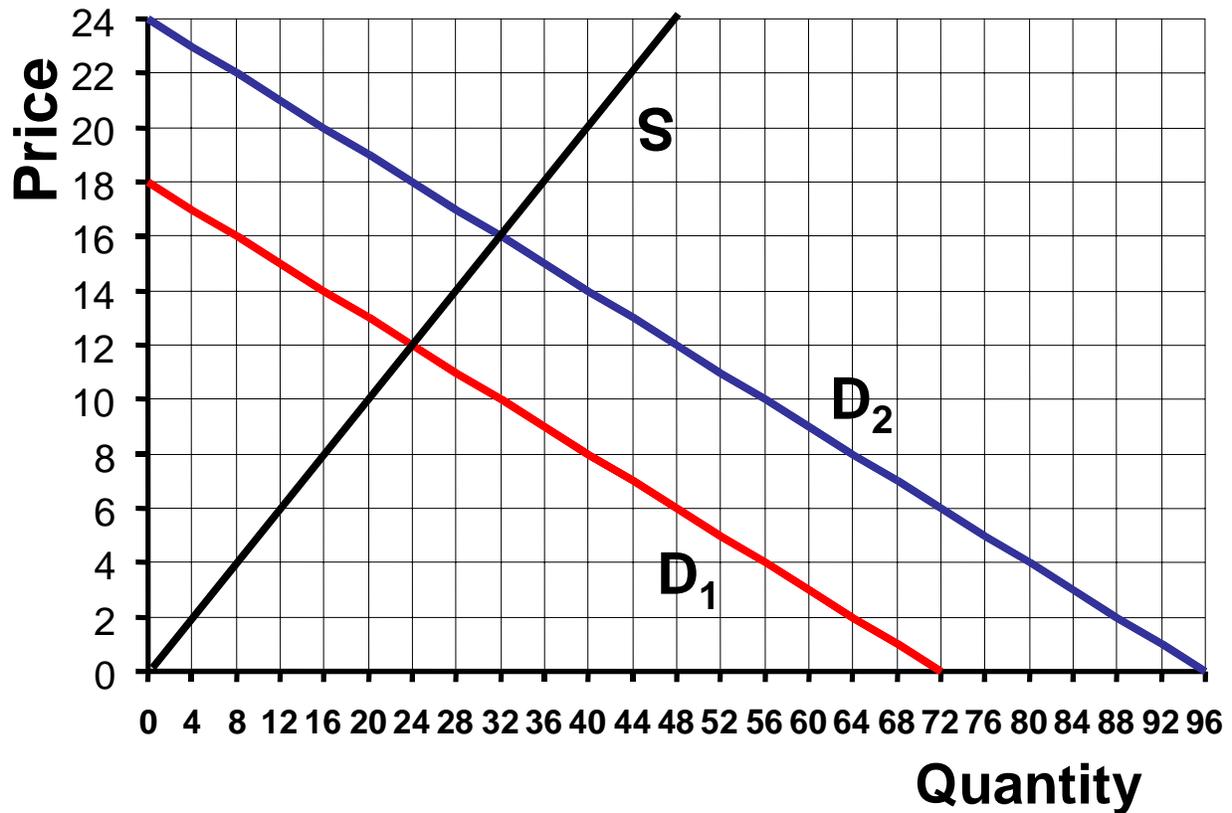
What are the equilibrium price and quantity when demand is D_1?
a. P = 10, Q = 32
b. P = 16, Q = 32
c. P = 14, Q = 16
d. P = 12, Q = 24
e. P = 12, Q = 48

25. When the demand shifts from D_1 to D_2, what is the excess demand at a price of $10?

a. 32
b. 24
c. 36
d. -24
e. 12

26. Consider the following production set for corn and soybean. Initially the production possibility frontier is represented by PPF_1. After some change, it is represented by PPF_2.

Production Possibility Set
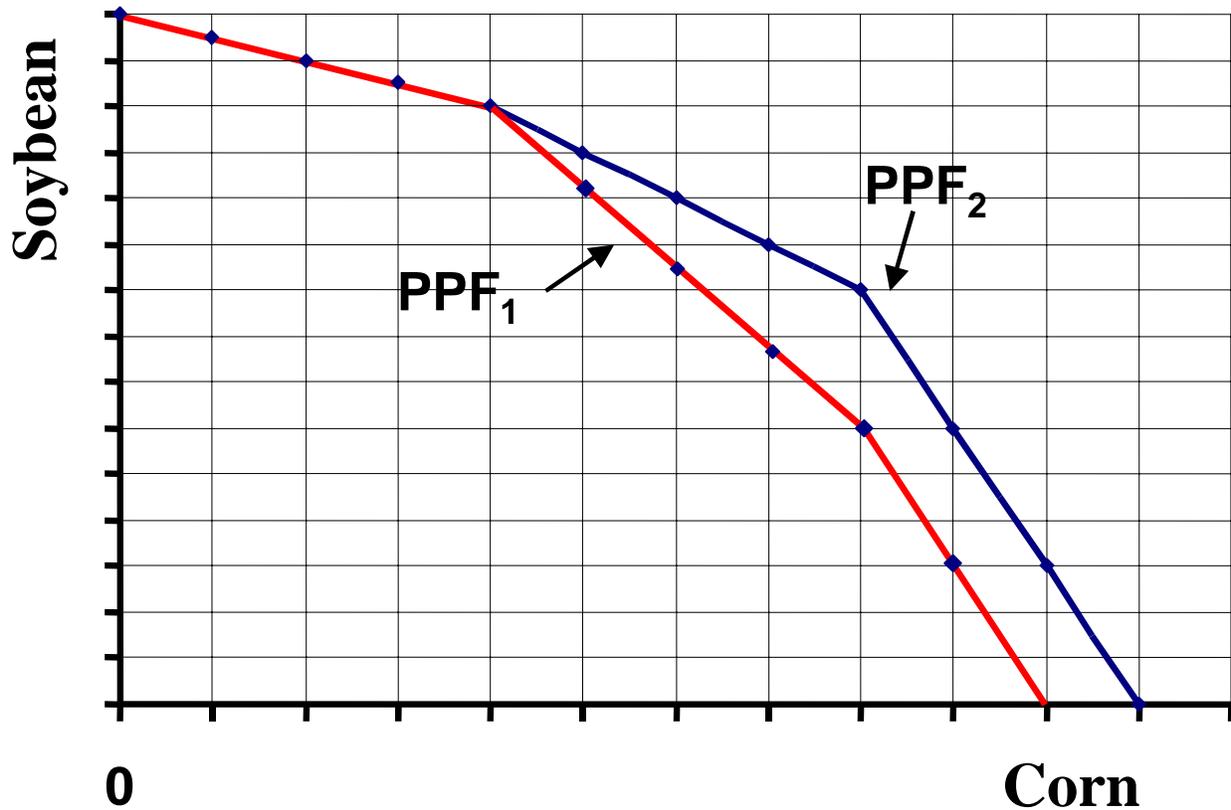
Which of the following is the most reasonable explanation for this move?

a. There is an increase in the price of corn.
b. A new pesticide is developed that improves the production of corn, but has no impact on soybean production.
c. There is an increase in the land available to grow either crop.
d. Some waste land in the South is reclaimed for agricultural purposes. This land is better suited to grow soybean.
e. A new more efficient planter for corn and soybean is developed.

Economics 101
Spring 2001
Section 4 - Hallam
Exam 1A (Blue)
Key

Question	Correct Answer		Question	Correct Answer	
1	d		14	e	
2	b		15	c	
3	e		16	e	
4	d		17	c	
5	c		18	a	
6	c		19	d	
7	e		20	b	
8	c		21	c	
9	c		22	c	
10	d		23	d	
11	d		24	d	
12	a		25	c	
13	b		26	b	