University of Lethbridge - Department of Economics
ECON 1010 - Introduction to Microeconomics
Instructor: Michael G. Lanyi

Lab #3

Chapter 3 — Demand and Supply

1) Which market is an example of a market for goods?
   A) labour market
   B) capital market
   C) apple market
   D) energy market
   E) haircut market

Answer: C
User1:

2) A relative price is
   A) an opportunity cost.
   B) the ration of one price to another.
   C) a quantity of a "basket" of goods and services forgone.
   D) determined by demand and supply.
   E) all of the above.

Answer: E
User1: Study Guide

Use the table below to answer the following question(s).

Table 3.1

Year	Coffee Price	Tea Price	Cola Price
2000	$1.25	$1.10	$0.80
2001	$1.50	$1.00	$1.00
2002	$1.25	$1.20	$1.00

3) Consider Table 3.1. In 2000, the relative price of coffee in terms of tea is
   A) 1.25.
   B) 1.00.
   C) 1.14.
   D) 0.88.
   E) 1.10.

Answer: C
User1:

4) The law of demand states that, all else constant,

A) as income increases, willingness to pay for the last unit increases.

B) price and quantity supplied are positively related.

C) the higher the price of a good, the smaller is the quantity supplied.

D) the higher the price of a good, the greater is the quantity demanded.

E) the higher the price of a good, the smaller is the quantity demanded.

Answer: E

User1:

5) Which one of the following could shift the demand curve for grape jelly to the right?

A) a fall in the population

B) a decrease in the price of grape jelly

C) an increase in the price of peanut butter, a complement

D) a decrease in the price of strawberry preserves, a substitute

E) an increase in income if grape jelly is a normal good

Answer: E

User1:

6) An increase in the price of ground beef will

A) increase the demand for chicken, a substitute for beef.

B) increase the demand for hamburger buns, a complement for beef.

C) increase the quantity demanded of ground beef.

D) decrease the quantity demanded of ground beef.

E) both A and D.

Answer: E

User1:

7) An increase in income will

A) increase the demand for turnips if turnips are inferior goods.

B) decrease the supply of turnips.

C) increase the supply of turnips.

D) increase the demand for turnips if turnips are normal goods.

E) decrease the demand for turnips if turnips have a very low price.

Answer: D

User1:

Use the figure below to answer the following question(s).

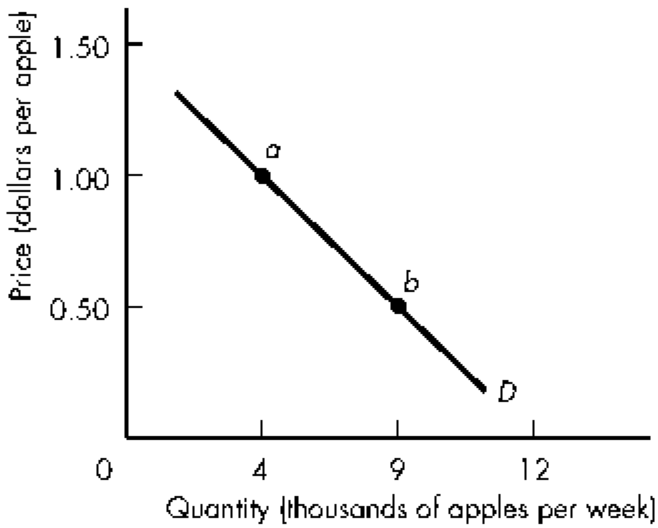

Figure 3.1

8) Which one of the following would result in a movement from point *a* to point *b* in Figure 3.1?

A) a decrease in the price of apples

B) an increase in the price of bananas

C) public concern about chemicals sprayed on apples

D) an increase in the price of oranges

E) an increase in population size

Answer: A

User1:

Use the figure below to answer the following question(s).

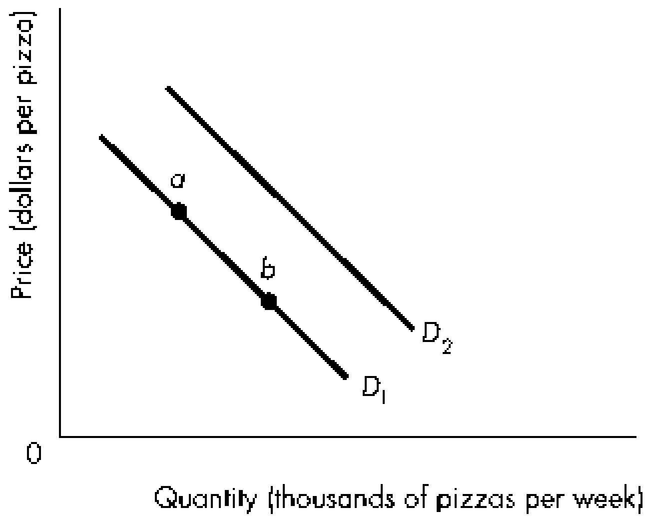

Figure 3.2

9) Which one of the following would cause a shift in demand from D_1 to D_2 in Figure 3.2?

A) a decrease in the price of pizzas

B) an increase in the price of pizzas

C) an increase in the price of hamburgers, a substitute for pizzas

D) an increase in the price of Coke, a complement for pizzas

E) an increase in the supply of pizzas

Answer: C

User1:

10) If an increase in the price of good *A* causes the demand curve for good *B* to shift to the left, then

A) *A* and *B* are complements in production.

B) *B* is an inferior good.

C) *B* is a normal good.

D) *A* and *B* are substitutes in consumption.

E) *A* and *B* are complements in consumption.

Answer: E

User1: Study Guide

11) If a decrease in the price of good X leads to a decrease in the demand for good *Y*, then

A) X and *Y* are independent from each other.

B) X and *Y* are complements in consumption.

C) X is an inferior good.

D) X is a normal good.

E) X and *Y* are substitutes in consumption.

Answer: E

User1:

12) Good A is a normal good if

A) an increase in the price of a substitute causes the demand for A to increase.

B) income and the demand for A are negatively related.

C) an increase in the price of a complement causes the demand for A to decrease.

D) good A satisfies the law of demand.

E) an increase in income causes the demand for A to increase.

Answer: E

User1:

13) If the demand for beer depends negatively on the price of beer (P_B), positively on the outside temperature (T), positively on the number of exams written that day (E), and positively on the price of wine (P_W), which of the following is a possible equation of the demand curve for beer?

A) $Q = 100 - 5P_B + 5T + 10E - 2P_W$

B) $Q = 100 - 5P_B - 5T - 10E + 2P_W$

C) $Q = 100 + 5P_B + 5T + 10E - 2P_W$

D) $Q = 100 + 5P_B + 5T + 10E + 2P_W$

E) $Q = 100 - 5P_B + 5T + 10E + 2P_W$

Answer: E

User1:

14) If the demand for pizzas depends negatively on the price of pizzas (P_P), positively on income (I), positively on the number of parties in a weekend (F), and negatively on the price of beer (P_B), which of the following is a possible equation of the demand curve for pizzas?

A) $Q = 100 - 5P_P - 5I - 10F + 2P_B$

B) $Q = 100 + 5P_P + 5I + 10F + 2P_B$

C) $Q = 100 - 5P_P + 5I + 10F + 2P_B$

D) $Q = 100 + 5P_P + 5I + 10F - 2P_B$

E) $Q = 100 - 5P_P + 5I + 10F - 2P_B$

Answer: E

User1:

15) The supply curve of a good slopes upward to the right because of

A) the law of supply.

B) technological improvements over time.

C) the fact that prices tend to increase over time.

D) the existence of substitute goods.

E) the law of demand.

Answer: A

User1:

16) If a producer can use its resources to produce either good *A* or good *B*, then an increase in the price of *A* will cause

A) a decrease in the supply of *B*.

B) an increase in the supply of *B*.

C) an increase in the supply of *A*.

D) a decrease in the supply of *A*.

E) both C and D.

Answer: A

User1:

17) If the production of good *A* is a by-product of the production of good *B*, then

A) *A* and *B* are substitutes in production.

B) *A* and *B* are complements in production.

C) an increase in the price of *A* will cause an increase in the supply of *B*.

D) an increase in the price of *A* will cause a decrease in the demand for *B*.

E) both B and C.

Answer: E

User1:

18) If good *A* is a by-product of the production of good *B*, then an increase in the price of *A* will cause

A) an increase in the quantity supplied of *A*.

B) a decrease in the quantity supplied of *A*.

C) an increase in the supply of *B*.

D) a decrease in the supply of *B*.

E) both A and C.

Answer: E

User1:

19) Which one of the following would *not* shift the supply curve for good *X* to the right?

A) an increase in the price of *X*

B) a decrease in the price of *Y*, a substitute for the production of *X*

C) a reduction in the price of resources used in producing *X*

D) an improvement in technology affecting the production of *X*

E) an increase in the price of *Y*, a complement in the production of *X*

Answer: A

User1:

20) A decrease in the quantity supplied is represented by a

A) movement up the supply curve.

B) movement down the supply curve.

C) rightward shift of the demand curve.

D) leftward shift of the supply curve.

E) rightward shift of the supply curve.

Answer: B

User1:

21) Which of the following will shift the supply curve for good X rightward?

A) an increase in the cost of capital used to produce good X

B) an increase in the price of energy

C) a decrease in the wages of workers employed to produce good X

D) an old technology that is used to produce good X

E) a decrease in the number of suppliers of good X

Answer: C

User1:

22) A rise in the price of a good will cause

A) the supply of the good to increase.

B) the demand for the good to decrease.

C) a movement down and to the right along the demand curve.

D) a movement up and to the right along the supply curve.

E) the demand for a complementary good to rise.

Answer: D

User1:

23) If the number of suppliers for good Y increases, then

A) the supply curve for good Y will shift to the left.

B) the supply curve for good Y will remain unchanged.

C) a movement up on the same supply curve will occur.

D) a movement down on the same supply curve will occur.

E) the supply curve for good Y will shift to the right.

Answer: E

User1:

24) If the supply of wheat depends positively on the price of wheat (P_W), positively on the amount of sunshine (S), and negatively on the price of flax (P_F), which one of the following is a possible equation of the supply curve of wheat?

A) $Q = 200 - 10P_W - 5S + P_F$

B) $Q = 200 + 10P_W + 5S - P_F$

C) $Q = 200 - 10P_W + 5S - P_F$

D) $Q = 200 - 10P_W + 5S + P_F$

E) $Q = 200 + 10P_W - 5S - P_F$

Answer: B

User1:

25) If the supply of economic tutoring depends positively on the price of economic tutoring (P_E), positively on the amount of marking jobs (J), and positively on the price of beer (P_B), which one of the following is a possible equation of the supply curve of economic tutoring?

A) $Q = 200 + 10P_E - 5J - P_B$

B) $Q = 200 + 10P_E + 5J + P_B$

C) $Q = 200 - 10P_E - 5J + P_B$

D) $Q = 200 - 10P_E + 5J + P_B$

E) $Q = 200 - 10P_E + 5J - P_B$

Answer: B

User1:

Use the figure below to answer the following question(s).

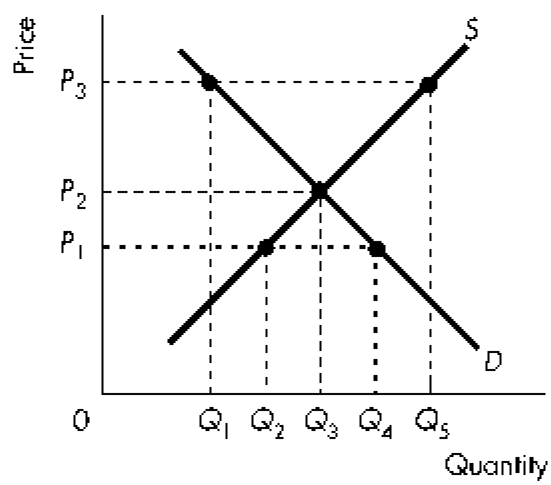

Figure 3.3

26) At price P_3 in Figure 3.3,

A) there is a surplus in the amount $Q_5 - Q_1$.

B) this market is in equilibrium.

C) there is a shortage in the amount of $Q_5 - Q_1$.

D) equilibrium quantity is Q_5.

E) there is a tendency for the price to rise.

Answer: A

User1:

Use the figure below to answer the following question(s).

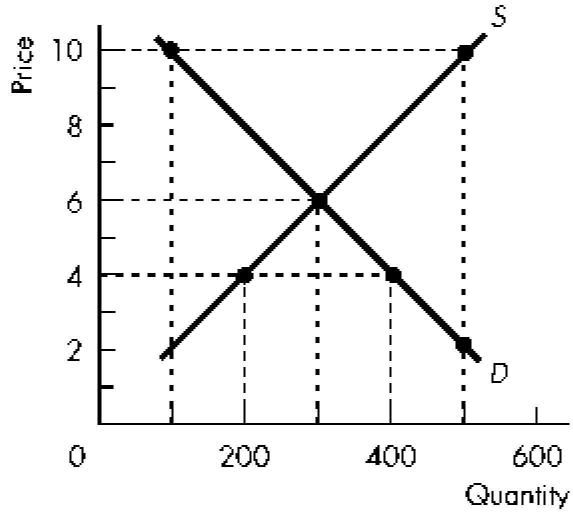

Figure 3.4

27) The equilibrium price in the market illustrated by Figure 3.4 is

A) $6.
B) $2.
C) $8.
D) $4.
E) 10.

Answer: A
User1:

28) At a price of $10 in Figure 3.4,

A) there is a surplus of 200 units.
B) there is a shortage of 200 units.
C) there is a surplus of 400 units.
D) quantity will rise.
E) there is a shortage of 400 units.

Answer: C
User1:

29) The price of a good will increase if

A) it is an inferior good and income increases.
B) the price of a substitute in consumption decreases.
C) supply of the good decreases.
D) demand for the good decreases.
E) there is a surplus of the good.

Answer: C
User1:

Use the figure below to answer the following question(s).

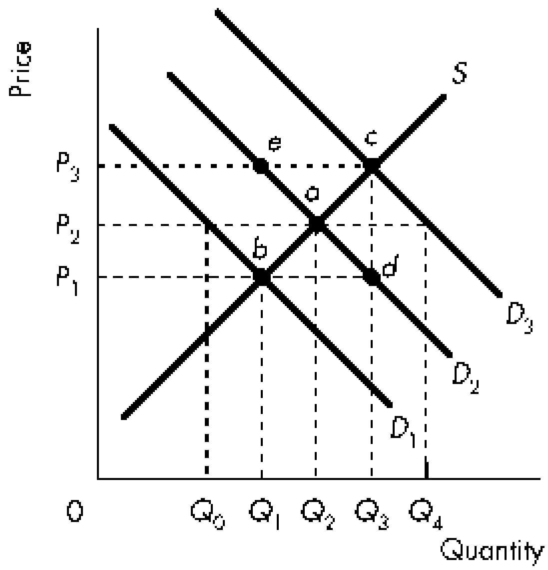

Figure 3.5

30) Initially, the demand curve for good *A* is D_2 in Figure 3.5. Suppose good *B* is a substitute (in consumption). If the price of *B* falls,

A) there will be a surplus of good *A* at P_2.

B) the equilibrium quantity will rise.

C) the demand for good *A* will shift from D_2 to D_3.

D) the price of *A* will rise.

E) all of the above *except* B.

Answer: A

User1:

31) If *A* and *B* are substitute goods (in consumption) and the price of *A* increases, we will observe

A) an increase in the price but a decrease in the equilibrium quantity of *B*.

B) an increase in the price and the equilibrium quantity of *B*.

C) a decrease in price but an increase in the equilibrium quantity of *B*.

D) a decrease in the price and the equilibrium quantity of *B*.

E) none of the above.

Answer: B

User1:

32) Suppose we observe both an increase in the price of good *A* and an increase in the quantity of good *A* bought and sold. Which one of the following is a likely explanation?

A) The supply of *A* has decreased.

B) The demand for *A* has decreased.

C) The demand for *A* has increased.

D) The law of demand is violated.

E) The supply of *A* has increased.

Answer: C

User1:

33) Suppose we observe both a decrease in the price of good *A* and an increase in the quantity of good *A* bought and sold. Which one of the following is a likely explanation?

A) The supply of *A* has increased.

B) The law of supply is violated.

C) The supply of *A* has decreased.

D) The demand for *A* has decreased.

E) The demand for *A* has increased.

Answer: A

User1:

34) If demand increases and supply decreases, then the

A) equilibrium quantity will increase but the effect on the price is indeterminate.

B) effect on both equilibrium price and quantity will be indeterminate.

C) equilibrium quantity will decrease but the effect on the price is indeterminate.

D) price will fall but the effect on the equilibrium quantity will be indeterminate.

E) price will rise but the effect on the equilibrium quantity will be indeterminate.

Answer: E

User1:

35) If we observe an increase in the equilibrium price of good *A*, we know that either the demand for *A* has

A) increased or the supply of *A* has increased (or both).

B) increased or the supply of *A* has decreased (or both).

C) decreased or the supply of *A* has increased (or both).

D) decreased or the supply of *A* has decreased (or both).

E) none of the above.

Answer: B

User1:

36) If we observe an increase in the equilibrium quantity, we know that

A) either the demand for *A* has decreased or the supply of *A* has decreased (or both).

B) either the demand for *A* has decreased or the supply of *A* has increased (or both).

C) either the demand for *A* has increased or the supply of *A* has decreased (or both).

D) either the demand for *A* has increased or the supply of *A* has increased (or both).

E) any of the above could have occurred; it depends on the relative size of the effects.

Answer: D
User1:

37) There have been severe problems in the Atlantic fishing industry, with large falls in the fish stocks. As a result of this,

A) equilibrium price and quantity will fall or rise depending on how large is the fall in fish stocks.

B) the fall in the fish stocks will lead to a shortage, and therefore, a rise in price and a fall in equilibrium quantity.

C) both equilibrium price and quantity will rise, as consumers will desire even more fish, since they are scarce.

D) the quantity of fish sold will increase, as fishermen will catch more to make up for the shortage.

E) the price of fish will fall, since no one will be able to purchase them.

Answer: B
User1:

Use the information below to answer the following question(s).

Fact 3.1

The market for coffee is initially in equilibrium with supply and demand curves of the usual shape. Pepsi is a substitute for coffee; cream is a complement for coffee. Consider the market for coffee. Assume that all *ceteris paribus* assumptions continue to hold *except* for the event(s) listed.

38) Consider Fact 3.1. If there is an increase in the wages of farm workers who harvest coffee beans, the equilibrium quantity of coffee will

A) rise or fall, depending on the slope of supply and demand curves.

B) rise or fall, depending on the relative shifts of the supply and demand curves.

C) fall.

D) rise.

E) remain the same.

Answer: C
User1:

39) Consider Fact 3.1. The price of cream falls. Simultaneously, there is an increase in the wages of farm workers who harvest coffee beans. The equilibrium quantity of coffee will

A) rise or fall, depending on the slope of the supply and demand curves.

B) fall.

C) rise or fall, depending on the relative shifts of supply and demand curves.

D) rise.

E) remain the same.

Answer: C

User1:

40) Consider Fact 3.1. A new study comes out, revealing that drinking Pepsi increases your ability to study. The equilibrium quantity of coffee will

A) rise or fall, depending on the slope of supply and demand curves.

B) rise.

C) remain the same.

D) rise or fall, depending on the relative shifts of the supply and demand curves.

E) fall.

Answer: E

User1:

Use the figure below to answer the following question(s).

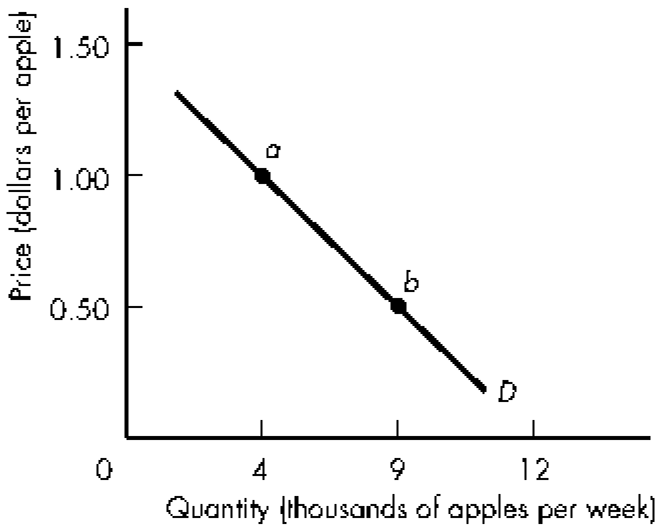

Figure 3.1

41) Point *a* in Figure 3.1 indicates that

A) $1 is the least that consumers are willing to pay for the 4,000th apple.
B) if the price is $1, consumers will plan to buy 4,000 apples.
C) consumers will only pay $1 for any apple.
D) consumers will not be in equilibrium if the price of an apple is $1.
E) if the price is more than $1, consumers will buy 9,000 apples.

Answer: B
User1:

42) Which one of the following statements best characterizes point *b* in Figure 3.1?

A) Producers would be unwilling to sell the 9,000th apple for less than $0.50.
B) At a price of $0.50, consumers will be unwilling to buy apples.
C) At point *b*, the market is in equilibrium.
D) At a price of $0.50, there will be an apple shortage.
E) The most that consumers would be willing to pay for the 9,000th apple is $0.50.

Answer: E
User1:

43) Given Figure 3.1, it seems that if the price is $1.5, consumers will buy ________ apples per week.

A) between 4,000 and 9,000
B) 9,000
C) 4,000
D) 12,000
E) zero

Answer: E
User1:

44) Given Figure 3.1, under what condition are consumers willing to buy more than 9,000 apples per week?

A) if the price is between $1 and $1.50

B) if the price is $0.75

C) if the price is below $0.50

D) if the price is between $1 and $0.50

E) if the price is above $1

Answer: C

User1:

45) Which one of the following would lead to an increase in the demand for hamburgers?

A) a decrease in consumer income if hamburgers are a normal good

B) a news report that hamburgers can cause skin diseases

C) a decrease in population size

D) an increase in the price of French fries, a complement of hamburgers

E) a new fad hamburger diet

Answer: E

User1:

Use the table below to answer the following question(s).

Table 3.2

Price (dollars per unit)	Quantity Demanded (units)	Quantity Supplied (units)
1	1,100	50
2	800	200
3	600	420
4	500	500
5	420	580
6	350	640
7	320	680
8	300	700

46) Refer to Table 3.2. At a price of $3,

A) there will be a 180-unit surplus.

B) the market will be in equilibrium.

C) there will be a 180-unit shortage.

D) there will be a tendency for the price to rise.

E) C and D.

Answer: E

User1:

47) In Table 3.2, the equilibrium price is

A) $7.

B) $4.

C) $3.

D) $5.

E) $1.

Answer: B

User1:

48) In Table 3.2, the equilibrium quantity is

A) 200 units.

B) 420 units.

C) 320 units.

D) 500 units.

E) none of the above; there is no equilibrium.

Answer: D

User1:

49) Refer to Table 3.2. The equilibrium quantity will be 420 units if

A) the price is fixed at $3.

B) the price is fixed at $4.

C) the price is fixed at $5.

D) both A and C.

E) none of the above.

Answer: E

User1:

50) Refer to Table 3.2. Excess demand occurs if

A) there is a surplus.

B) the price is $4.

C) the price is $7.

D) the price is $6.

E) the price is below $4.

Answer: E

User1:

51) Refer to Table 3.2. Excess supply occurs if

A) there is a shortage.

B) if the price is $3.

C) the price is $4.

D) the price is above $4.

E) the price is $2.

Answer: D

User1:

52) Refer to Table 3.2. If the price is $7, then excess supply is

A) 290.

B) 160.

C) zero.

D) 400.

E) 360.

Answer: E

User1:

53) Refer to Table 3.2. If the price is $3, then excess demand is

A) 180.

B) 1050.

C) 600.

D) 160.

E) zero.

Answer: A

User1:

54) If the price is above the equilibrium price, then

A) none of the good will be sold.

B) there is a shortage.

C) price will not change; producers will cut back production until the market is in equilibrium.

D) there is a surplus.

E) the price must rise to clear the market.

Answer: D

User1:

55) A shortage will exist if

A) there are not enough consumers.

B) there are not enough producers.

C) the price is above equilibrium.

D) demand decreases.

E) the price is below equilibrium.

Answer: E

User1:

56) Which one of the following correctly describes how price adjustment eliminates a surplus?

A) As the price rises, the quantity demanded increases while the quantity supplied decreases.

B) As the price falls, the quantity demanded increases while the quantity supplied decreases.

C) As the price falls, the demand for substitutes of the good falls, eliminating the surplus.

D) As the price falls, the quantity demanded decreases while the quantity supplied increases.

E) As the price rises, the quantity demanded decreases while the quantity supplied increases.

Answer: B

User1:

57) If *A* and *B* are substitute goods (in consumption) and the cost of a resource used in the production of *A* increases, then the price of

A) *A* will decrease, and the price of *B* will stay unchanged.

B) *A* and *B* will decrease.

C) *B* will increase but the price of *A* will decrease.

D) *A* and *B* will increase.

E) *B* will decrease but the price of *A* will increase.

Answer: D
User1:

58) If *A* and *B* are substitutes in production and the price of *A* falls, the supply of *B* will

A) decrease, and thus the price of *B* will increase.

B) decrease, and thus the price of *B* will decrease.

C) increase, and thus the price of *B* will increase.

D) increase, and thus the price of *B* will decrease.

E) shift depending on whether *A* and *B* are substitutes in consumption.

Answer: D
User1:

59) If *A* and *B* are complements in production and the price of *A* falls, the supply of *B* will

A) shift up or down depending on how close *A* and *B* are as complements.

B) increase, and thus the price of *B* will decrease.

C) decrease, and thus the price of *B* will decrease.

D) increase, and thus the price of *B* will increase.

E) decrease, and thus the price of *B* will increase.

Answer: E
User1:

60) A technological improvement in the production process of compact disc players will lead to a

A) fall in the price of CD players, and a leftward shift in the demand curve for compact discs.

B) fall in the price of CD players, and an increase in demand for records.

C) fall in the price of CD players, and a leftward shift in the demand curve for tape players.

D) fall in the price of CD players, and a fall in the demand for CD players.

E) rise in the price of CD players.

Answer: C
User1:

61) If Canadians suddenly develop a strong urge to escape the cold winter by taking vacations in Hawaii, the

A) price of luggage will rise, because luggage and vacations are complements.

B) price of airline tickets will fall, as ticket agents make deals in response to this change.

C) initial result of the change is a surplus of vacations in Hawaii, leading to a price rise.

D) price of skiing vacations in the mountains will rise.

E) price of vacations in Hawaii will rise and the overall quantity demanded will be lower.

Answer: A
User1:

62) DVD's and DVD-players are complements. An increase in the price of DVD's would cause which of the following in the market for DVD-players?

A) The equilibrium price and quantity of DVD-players would decrease.

B) The equilibrium price of DVD-players would increase and the equilibrium quantity would decrease.

C) The equilibrium price and quantity of DVD-players would increase.

D) The equilibrium price and the equilibrium quantity of DVD-players remain unchanged.

E) The equilibrium price of DVD-players would decrease and the equilibrium quantiy would increase.

Answer: A

User1:

Use the figure below to answer the following question(s).

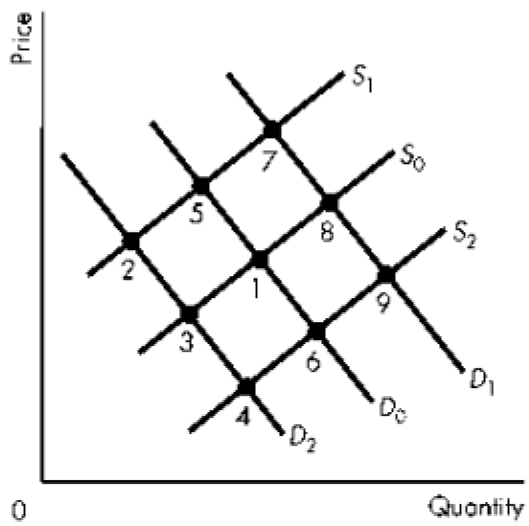

Figure 3.6

Original Equilibrium at 1.

63) Consider Figure 3.6, which represents the market for beans. If the price of peas, a substitute for beans in consumption, increases, what is the new *beans* equilibrium, *ceteris paribus*?

A) 5

B) 8

C) 9

D) 3

E) 6

Answer: B

User1:

64) Consider Figure 3.6, which represents the market for beer. If the price of pizza, a complement for beer in consumption, increases, what is the new *beer* equilibrium, *ceteris paribus*?

A) 3
B) 9
C) 8
D) 5
E) 6

Answer: A
User1:

65) Consider Figure 3.6, which represents the market for beans. If the price of peas, a substitute for beans in production, increases, what is the new *beans* equilibrium, *ceteris paribus*?

A) 3
B) 9
C) 5
D) 8
E) 6

Answer: C
User1:

66) Consider Figure 3.6, which represents the market for cow manure. If the price of milk, a complement for manure in production, increases, what is the new manure equilibrium, *ceteris paribus*?

A) 3
B) 6
C) 9
D) 5
E) 8

Answer: B
User1:

67) Consider Figure 3.6, which represents the market for beans. If the price of peas, a substitute for beans in consumption *and* in production, increases, what is the new *beans* equilibrium, *ceteris paribus*?

A) 7
B) 9
C) 4
D) 2
E) 3

Answer: A
User1:

68) Consider Figure 3.6, which represents the market for beans. If the price of peas, a substitute for beans in consumption, increases, *and* the cost of producing beans decreases, what is the new *beans* equilibrium, *ceteris paribus*?

A) 9

B) 3

C) 4

D) 7

E) 2

Answer: A

User1:

69) Consider Figure 3.6, which represents the market for tacos. A new scientific study reveals that tacos cause bad breath. Simultaneously, the cost of producing tacos decreases. What is the new equilibrium, *ceteris paribus*?

A) 3

B) 7

C) 4

D) 2

E) 9

Answer: C

User1:

70) Consider Figure 3.6, which represents the market for tacos. A new scientific study reveals that tacos cause bad breath. Simultaneously, the cost of producing tacos increases. What is the new equilibrium, *ceteris paribus*?

A) 3

B) 9

C) 7

D) 2

E) 4

Answer: D

User1: