

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

- 1) A university decides to change its late night bus service between the campus and student housing from a fare-based service to a free service. This statement means that the incentive to ride the bus _____ and the opportunity cost of a bus ride _____. The university's decision is a _____ decision.
- A) remains the same; remains the same; macroeconomic
 - B) changes; increases; microeconomic
 - C) changes; decreases; macroeconomic
 - D) remains the same; remains the same; microeconomic
 - E) changes; decreases; microeconomic
- 2) Consider a production possibilities frontier with corn production measured on the vertical axis and car production measured on the horizontal axis. Unusually good weather for growing corn shifts _____.
- A) the horizontal intercept of the *PPF* rightward but does not shift the vertical intercept of the *PPF*
 - B) the horizontal intercept of the *PPF* rightward and the vertical intercept of the *PPF* upward
 - C) the vertical intercept of the *PPF* upward but does not shift the horizontal intercept of the *PPF*
 - D) neither the horizontal intercept nor the vertical intercept of the *PPF*
 - E) the vertical intercept of the *PPF* downward and the horizontal intercept of the *PPF* leftward

Use the information below to answer the following question.

Fact 1

In an eight-hour day, Andy can produce either 24 loaves of bread or 8 kilograms of butter. In an eight-hour day, Rolfe can produce either 8 loaves of bread or 8 kilograms of butter.

- 3) Given Fact 1, Andy and Rolfe
- A) can gain from trade if Andy specializes in bread production and Rolfe specializes in butter production.
 - B) can gain from trade if Andy specializes in butter production and Rolfe specializes in bread production.
 - C) can trade, but only Andy will gain.
 - D) can trade, but only Rolfe will gain.
 - E) cannot gain from trade.

Use the table below to answer the following question.

Table 1

| Year | Coffee Price | Tea Price | Cola Price |
|------|--------------|-----------|------------|
| 2010 | \$1.25 | \$1.10 | \$0.80 |
| 2011 | \$1.50 | \$1.00 | \$1.00 |
| 2012 | \$1.25 | \$1.20 | \$1.00 |

- 4) Refer to Table 1. In 2012, the relative price of cola in terms of tea is
- A) 1.00.
 - B) 0.83.
 - C) 1.20.
 - D) 1.25.
 - E) unknown without more information.
- 5) Which one of the following would *not* shift the supply curve of good *X* to the right?
- A) a fall in the price of the factors of production used in producing *X*
 - B) an increase in the price of *Y*, a complement in production of *X*
 - C) an improvement in technology used in the production of *X*
 - D) a fall in the price of *Y*, a substitute in production of *X*
 - E) a rise in the price of *X*

Refer to the table below for the following question.

Table 2

| Price (dollars per bottle) | Quantity demanded (bottles per week) | Quantity supplied (bottles per week) |
|-------------------------------|---|---|
| 2 | 180 | 60 |
| 6 | 140 | 100 |
| 10 | 100 | 140 |
| 14 | 60 | 180 |
| 18 | 20 | 220 |

- 6) Refer to Table 2. The table shows the demand and supply schedules for shampoo. If the price is \$6 a bottle, there is a _____ of shampoo. So the price of a bottle of shampoo _____, the quantity demanded _____ and the quantity supplied _____. The market moves to equilibrium.
- A) surplus; rises; increases; decreases
 - B) surplus; falls; increases; decreases
 - C) shortage; rises; increases; decreases
 - D) shortage; rises; decreases; increases
 - E) shortage; falls; decreases; increases
- 7) If we observe a decrease in the equilibrium quantity of good A, we know that
- A) either the demand for A has increased 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 decreased 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) none of the above.

Use the figure below to answer the following question.

Table 3
Demand and Supply Schedules for Cups of Coffee each day at CoolU

| Price (dollars per cup) | Quantity Demanded (cups of coffee per day) | Quantity Supplied (cups of coffee per day) |
|----------------------------|--|--|
| 0.70 | 1,200 | 0 |
| 0.80 | 1,100 | 200 |
| 0.90 | 1,000 | 400 |
| 1.00 | 900 | 600 |
| 1.10 | 800 | 800 |
| 1.20 | 700 | 1,000 |
| 1.30 | 600 | 1,200 |
| 1.40 | 500 | 1,400 |
| 1.50 | 400 | 1,600 |

- 8) Refer to Table 3. Professor Hyper publishes a new study, showing that coffee raises the test performance of students. Students double their demand for coffee and the quantity of coffee demanded at each price doubles. In addition, a premature frost destroys half the coffee trees and the supply of coffee is cut in half. The new equilibrium price is \$_____ and the new equilibrium quantity is _____ cups a day.
- A) 1.10; 1,600
 - B) 1.10; 400
 - C) 1.10; 800
 - D) 1.50; 800
 - E) 1.50; 400.
- 9) Suppose there is an increase in the cost of resources used in the production of good A. Then
- A) total revenue will increase because the price of A must rise.
 - B) if the price of A rises, we know the demand for A is elastic.
 - C) total revenue must fall because the quantity bought and sold of A must fall.
 - D) if the total revenue from sales of A rises, we know the demand for A is elastic.
 - E) if the total revenue from sales of A falls, we know the demand for A is elastic.

10) When the price of a bicycle falls from \$220 to \$180 and other things remain the same

- I. the quantity of bicycles demanded increases from 150 to 250 an hour.
- II. the quantity of skateboards demanded decreases from 125 to 75 an hour.
- III. the quantity of bicycle helmets demanded increases from 170 to 230 an hour.

Bicycle helmets and bicycles are _____ because a fall in the price of a bicycle brings _____ in the quantity demanded of bicycle helmets. The cross elasticity of demand for bicycle helmets with respect to bicycles is _____.

- A) complements; a decrease; 0.67
- B) complements; an increase; 1.5
- C) substitutes; a decrease; 1.5
- D) complements; an increase; -1.5
- E) substitutes; an increase; -0.67

Use the figure below to answer the following question.

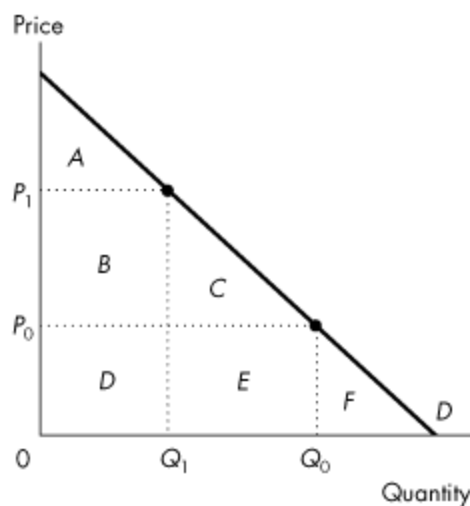


Figure 1

11) Refer to Figure 1. If the price is P_0 , consumer surplus is

- A) A.
- B) B plus C.
- C) D plus E.
- D) A plus B plus C plus D plus E.
- E) A plus B plus C.

Use the information below to answer the following question.

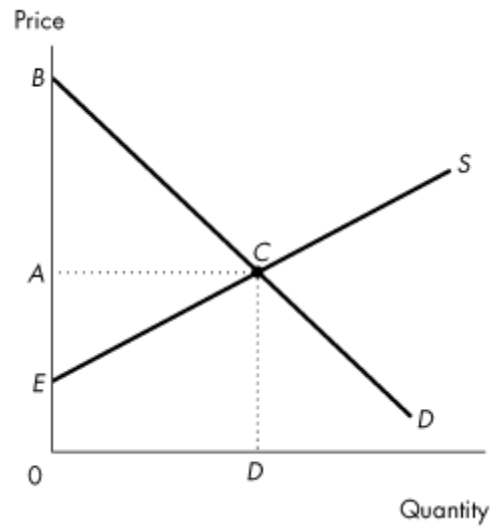


Figure 2

- 12) Consider the demand and supply curves in Figure 2. If the market is at the competitive equilibrium, which area in the diagram indicates producer surplus?
- A) $0BCD$
 - B) ABC
 - C) AEC
 - D) EBC
 - E) $0ECD$

Use the table below to answer the following question.

Table 4

| Wage Rate (dollars per hour) | Quantity Supplied (millions of hours) | Quantity Demanded (millions of hours) |
|---------------------------------|--|--|
| 7 | 60 | 30 |
| 6 | 50 | 40 |
| 5 | 40 | 50 |
| 4 | 30 | 60 |
| 3 | 20 | 70 |

- 13) Refer to Table 4. What is the level of unemployment in millions of hours if the minimum wage is set at \$7 per hour?
- A) 10
 - B) 30
 - C) 40
 - D) 20
 - E) zero
- 14) When a sales tax is imposed on sellers, the supply curve shifts so that the vertical distance between the original supply curve and supply plus tax curve equals the
- A) sales tax divided by the price elasticity of supply.
 - B) sales tax multiplied by the price elasticity of demand.
 - C) amount of the sales tax per unit.
 - D) sales tax multiplied by the price elasticity of supply.
 - E) sales tax divided by the price elasticity of demand.

Use the table below to answer the following question.

Table 5
The Market for a Prohibited Good.

| Price (dollars) | Quantity Demanded (units) | Quantity Supplied (units) |
|--------------------|------------------------------|------------------------------|
| 5 | 700 | 100 |
| 6 | 600 | 200 |
| 7 | 500 | 300 |
| 8 | 400 | 400 |
| 9 | 300 | 500 |
| 10 | 200 | 600 |
| 11 | 100 | 700 |

- 15) Refer to Table 5. If a \$2-per-unit cost of breaking the law is imposed on both the buyers and the sellers, the new price is _____ and the new equilibrium quantity is _____ units.
- A) \$8; 200
 - B) \$8; 400
 - C) \$7; 300
 - D) \$8; 300
 - E) \$9; 300