

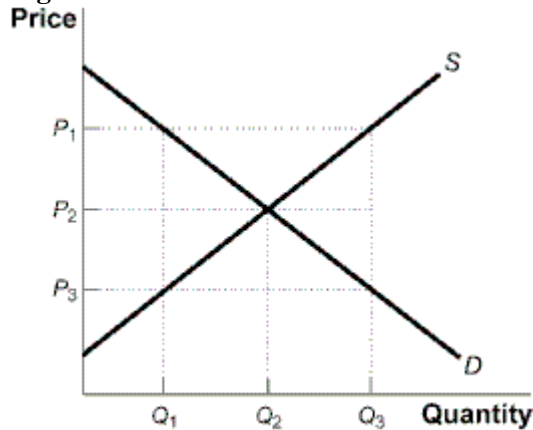
## AP Economics Unit 3 - Practice

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

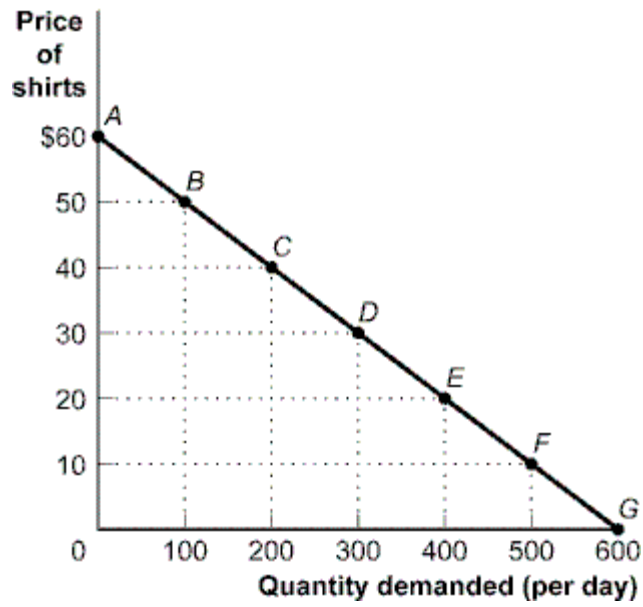
- The effect of a binding price ceiling includes:
  - price higher than equilibrium, product shortage and allocative efficiency
  - price higher than equilibrium, product surplus and allocative inefficiency
  - price lower than equilibrium, product shortage and allocative efficiency
  - price lower than equilibrium, product surplus, and allocative inefficiency
  - price lower than equilibrium, product shortage, and allocative inefficiency
- The government imposes a price floor below the equilibrium price. The price floor will cause:
  - quantity demanded to decrease.
  - quantity supplied to increase.
  - a shortage of the good.
  - a surplus of the good.
  - not a damn thing in the market to change as this is non-binding price control.

**Figure 8-12: Market for Milk**



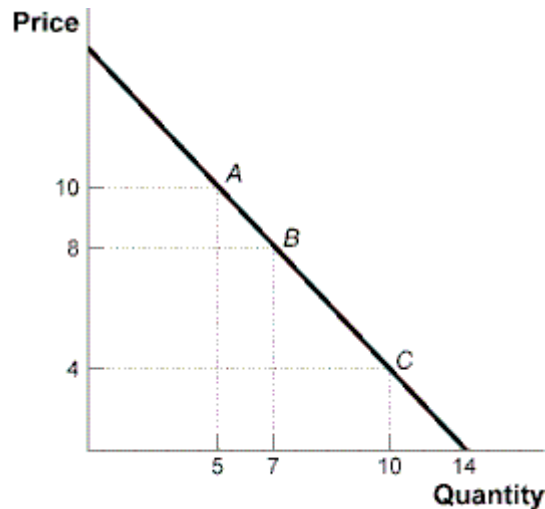
- (Figure 8-12: Market for Milk) If there is a binding price floor in the market for milk, the price would be equal to \_\_\_\_\_,  $Q_d$  would be at \_\_\_\_\_, and  $Q_s$  would be at \_\_\_\_\_.
  - $P_1$ ;  $Q_1$ ;  $Q_3$
  - $P_2$ ;  $Q_2$ ;  $Q_2$
  - $P_1$ ;  $Q_3$ ;  $Q_1$
  - $P_3$ ;  $Q_3$ ;  $Q_1$
  - $P_1$ ;  $Q_2$ ;  $Q_3$

**Figure 47-1: Demand for Shirts**



4. (Figure 47-1: Demand for Shirts) On the linear demand curve between B and D, shirts are:
  - a. elastic because as price falls so does total revenue.
  - b. elastic because as price falls so does total expenditures.
  - c. elastic because as price falls total revenue rises.
  - d. inelastic, because as price falls so does total revenues.
  - e. inelasitic, because as price falls total expeditures rise.
5. (Figure 47-1: Demand for Shirts) The price elasticity of demand for the segment *AB*, is:
  - a. equal to zero.
  - b. greater than one.
  - c. less than one, but greater than zero.
  - d. equal to one.
  - e. impossible to determine without more information.
6. (Figure 47-1: Demand for Shirts) The absolute value of the price elasticity of demand for the segment *BC* is:
  - a. less than the price elasticity of demand for segment *AB*.
  - b. is zero.
  - c. greater than 3.
  - d. less than the price elasticity of demand for segment *CD*.
  - e. equal to the price elasticity of demand for segment *CD*.

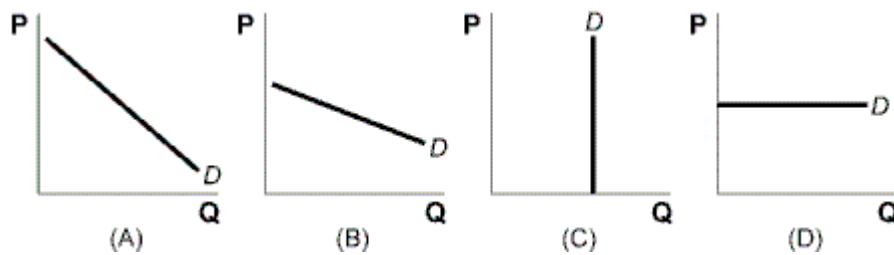
**Figure 47-4: Linear Demand Curve II**



7. (Figure 47-4: Linear Demand Curve II) If price was initially set at \$8 and then increased to \$10, one would find that total revenue:
  - a. decreases, QD change is greater than P change.
  - b. increases, QD change is greater than P change.
  - c. stays the same, as both QD change is equivalent to P change.
  - d. increases as P change is greater than QD change.
  - e. decreases, as P change is greater than QD change.
8. If an increase in income leads to a decrease in the demand for a good, then the good is said to be:
  - a. normal.
  - b. a luxury.
  - c. inferior.
  - d. a staple or necessity.
  - e. complementary.
9. The price elasticity of demand measures the responsiveness of the change in:
  - a. quantity demanded to a change in consumer income
  - b. price to a change in quantity demanded.
  - c. the slope of the demand curve to a change in price.
  - d. the slope of the demand curve to a change in quantity demanded.
  - e. quantity demanded to a change in price.
10. The price elasticity of demand is computed as the percentage change in:
  - a. quantity demanded divided by the percentage change in quantity supplied.
  - b. price divided by the percentage change in quantity demanded.
  - c. quantity demanded divided by the percentage change in income.
  - d. quantity demanded divided by the percentage change in price.
  - e. quantity supplied divided by the percentage change in price.
11. A shirt manufacturer sold 10 dozen shirts per day when the price was \$4 per shirt and sold 10 dozen shirts per day when the price was \$3 per shirt. The absolute value of the price elasticity of demand, is:
  - a. greater than zero but less than 1.
  - b. equal to 1.
  - c. greater than 1 but less than 3.
  - d. greater than 3.
  - e. equal to zero.
12. The demand for textbooks is price inelastic. Which of the following would explain this?
  - a. Many alternative textbooks can be used as substitutes.

- b. Students have a lot of time to adjust to price changes.
  - c. Textbook purchases consume a large portion of most students' income.
  - d. Textbooks are luxury goods for college students.
  - e. The good is a necessity for college students.
13. Each month Jacquelyn spends exactly \$50 on ice cream regardless of the price of each container. Jacquelyn's price elasticity of demand for ice cream is:
- a. 0.
  - b. 1.
  - c. greater than 1, but less than 5.
  - d. less than 1, but greater than 0.
  - e. greater than 5.

**Figure 47-3: Demand Curves**



14. (Figure 47-3: Linear Demand Curve) If you currently sell your good at \$7, and you increase the price to \$8, your total revenue will \_\_\_\_\_, and you notice that your price elasticity of demand is \_\_\_\_\_.
- a. increase; elastic
  - b. decrease; elastic
  - c. increase; unit elastic
  - d. decrease; inelastic
  - e. increase; inelastic
15. Suppose that an increase in the price of a good leads to an increase in total revenue for sellers of that good. All else equal, at its current price demand for the good must be:
- a. price-inelastic.
  - b. price-elastic.
  - c. perfectly price-elastic.
  - d. price unit-elastic.
  - e. horizontal.
16. If a good is a necessity with few substitutes, then the price elasticity of demand will tend to be:
- a. more price-elastic.
  - b. greater than 1.
  - c. equal to 1.
  - d. the same as that of a luxury good.
  - e. more price-inelastic.
17. If a good is a luxury item that looms large in the household budget, then the price elasticity of demand will tend to be:
- a. more price-elastic.
  - b. less price-elastic.
  - c. equal to 1.
  - d. the same as that of a good that is a necessity.
  - e. equal to zero.

18. Suppose the cross-price elasticity between demand for Burger King burgers and the price of McDonald's burgers is 0.8. If McDonald's increases the price of its burgers by 10%, then:
  - a. Burger King will sell 10% more burgers.
  - b. Burger King will sell 8% more burgers.
  - c. Burger King will sell 8% fewer burgers.
  - d. McDonald's will sell 8% fewer burgers.
  - e. Burger King will sell 80% more burgers.
19. Suppose the price of cereal rose by 25% and the quantity of milk sold decreased by 50%. Then we know that the:
  - a. cross-price elasticity between cereal and milk is  $-2$ .
  - b. cross-price elasticity between cereal and milk is  $-0.5$ .
  - c. price elasticity of demand for milk is 2.
  - d. cross-price elasticity of demand for milk is 2.
  - e. price elasticity of demand for cereal is 0.5.
20. Nico's DVD rentals increase by 10% when his income increases by 20%. Based on this information, we know that:
  - a. DVDs are a normal good.
  - b. DVDs are an inferior good.
  - c. DVDs have many substitutes.
  - d. the price of DVDs has decreased.
  - e. DVDs are underpriced.
21. Kayla and Jada are roommates in New York City. Both Kayla and Jada recently received pay raises. Kayla now buys more CDs than before, but Jada buys fewer. Kayla behaves as if CDs are \_\_\_\_\_ goods and Jada's income elasticity of demand for CDs is \_\_\_\_\_.
  - a. normal; positive
  - b. normal; negative
  - c. inferior; positive
  - d. inferior; negative
  - e. normal; inferior
22. Which of the following is true?
  - a. When the income elasticity of demand is positive, the good is an inferior good.
  - b. When the income elasticity of demand is negative, the good is a normal good
  - c. Income elasticity of demand measures how much the demand for a good is affected by changes in consumers' incomes.
  - d. Income elasticity of demand measures the effect of the change in one good's price on the quantity demanded of the other good.
  - e. When the income elasticity for a good is positive, an increase in consumers' income will shift the demand for that good to the left.
23. If the price elasticity of supply is less than 1, then supply is:
  - a. price-elastic.
  - b. price-inelastic.
  - c. price unit-elastic.
  - d. very responsive to price changes.
  - e. supply is income-inelastic.

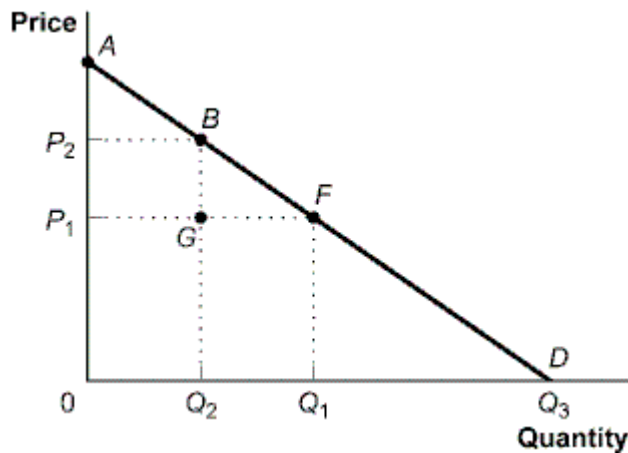
This table shows some Atlanta college students' willingness to pay to see *The Nutty Nutcracker*, by the Atlanta Ballet.

Student	Willingness to Pay
Lois	\$100

Miguel	90
Narum	65
Oscar	50
Pat	15
<b>Table 49-2: Consumer Surplus</b>	

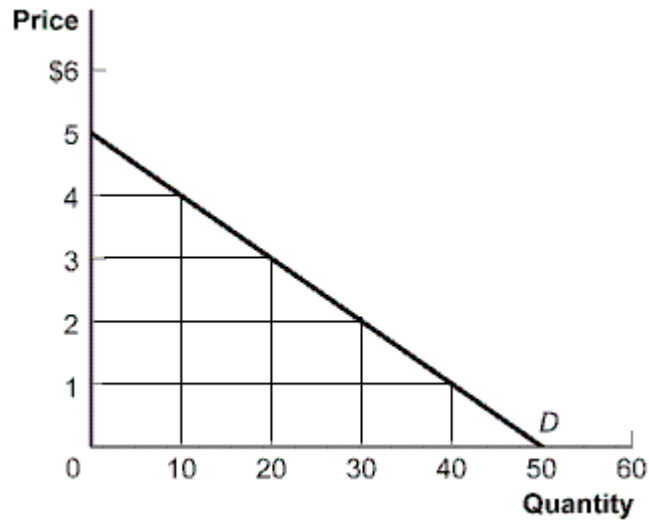
24. (Table 49-2: Consumer Surplus) If the price of a ticket to see *The Nutty Nutcracker* is \$50, then Narum's consumer surplus is:
- \$60.
  - \$50.
  - \$15.
  - \$240.
  - \$115.
25. (Table 49-2: Consumer Surplus) If the price of a ticket to see *The Nutty Nutcracker* is \$50 and there is no other market for tickets, then total consumer surplus for the five students is:
- \$105.
  - \$130.
  - \$270.
  - \$320.
  - \$200.

**Figure 49-2: Consumer Surplus II**



26. (Figure 49-2: Consumer Surplus II) At a price of  $P_1$ , consumer surplus equals the area:
- $ABP_2$ .
  - $AFP_1$ .
  - $AQ_30$ .
  - $P_1P_2BF$ .
  - $0P_1FQ_1$ .
27. (Figure 49-2: Consumer Surplus II) If the good is free, consumer surplus equals the area:
- $ABP_2$ .
  - $AFP_1$ .
  - $BGF$ .
  - $AQ_30$ .
  - $0P_1FQ_1$ .

**Figure 49-3: Consumer Surplus III**



28. (Figure 49-3: Consumer Surplus III) If the price of the good is \$2, consumer surplus will equal:
- \$30.
  - \$15.
  - \$60.
  - \$90.
  - \$45.
29. (Figure 49-3: Consumer Surplus III) If the price of the good increases from \$3 to \$4, consumer surplus will decrease by:
- \$5.
  - \$10.
  - \$15.
  - \$20.
  - \$25.

The table below shows the willingness to sell *The Nutty Nutcracker* tickets by five students who have those tickets as part of their student activity fees.

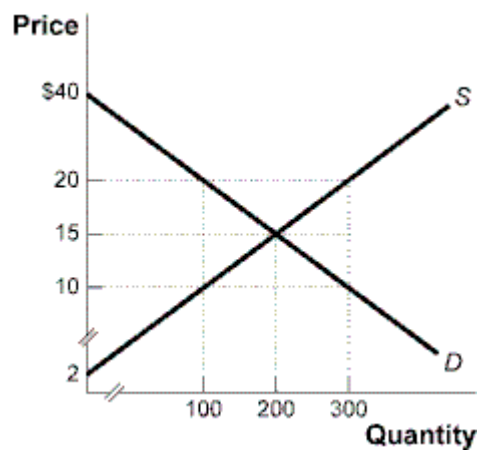
Student	Willingness to Sell
Caitlin	\$1
Dudley	25
Evan	60
Francisco	90
Grace	100

**Table 49-6: Producer Surplus**

30. (Table 49-6: Producer Surplus) If the price of a ticket to see *The Nutty Nutcracker* is \$50, then Francisco's producer surplus is:
- \$0.
  - \$40.

- c. \$90.
  - d. \$240.
  - e. \$140.
31. (Table 49-6: Producer Surplus) If the price of a ticket to see *The Nutty Nutcracker* is \$50 and there is no other market for tickets, then total producer surplus for the five students is:
- a. \$50.
  - b. \$74.
  - c. \$100.
  - d. \$276.
  - e. \$86.

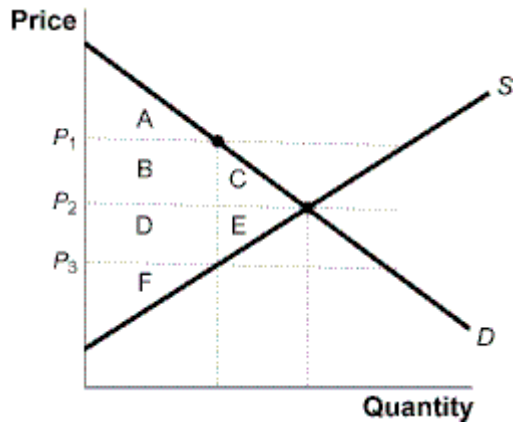
**Figure 49-16: Wireless Mouse Market**



32. (Figure 49-16: Wireless Mouse Market) Using the graph showing the wireless mouse market, calculate producer surplus when the market is in equilibrium.
- a. \$4,000
  - b. \$1,300
  - c. \$2,500
  - d. \$3,000
  - e. \$1,500
33. (Figure 49-16: Wireless Mouse Market) Using the graph showing the wireless mouse market, calculate the change in producer surplus when the price increases from \$10 to \$15.
- a. \$250
  - b. \$1,000
  - c. \$750
  - d. \$3,000
  - e. \$1,500

**Figure 49-17: Change in Total Surplus**





34. (Figure 49-17: Change in Total Surplus) Which of the following area(s) represent the change in total surplus when the price falls from  $P_1$  to  $P_2$ ?
- A, B, and C
  - B and C
  - B, C, D, and E
  - C and E
  - C
35. Suppose the government imposes a \$10 excise tax on the sale of sweaters by charging suppliers \$10 for each sweater sold. If the demand curve for sweaters is downward sloping, we would predict that:
- the price of sweaters will increase by \$10.
  - consumers of sweaters will bear the entire burden of the tax.
  - the quantity of sweaters purchased will increase.
  - the price of sweaters will decrease by \$10.
  - the price of sweaters will increase by less than \$10.
36. An excise tax creates inefficiency in that the number of transactions in a market is reduced. Because the tax discourages mutually beneficial transactions, there is \_\_\_\_\_ from a tax.
- quota rent
  - deadweight loss
  - surplus
  - both a shortage and a surplus
  - a shortage

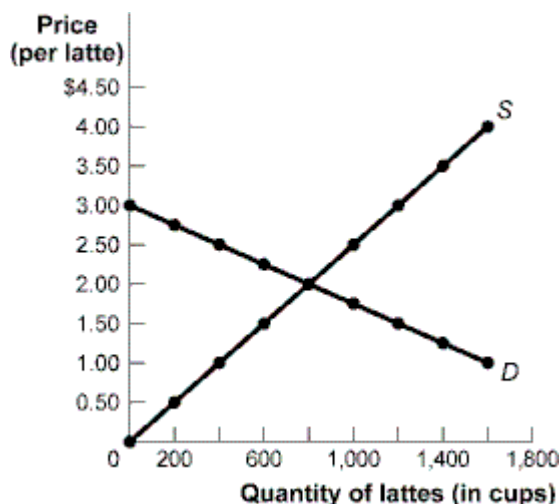
Market for Fried Twinkies		
Price (unit)	Quantity Demanded (units)	Quantity Supplied (units)
\$1.10	9,000	3,000
1.20	8,000	5,000
1.30	7,000	7,000
1.40	6,000	9,000
1.50	5,000	11,000

**Table 50-1: Market for Fried Twinkies**

37. (Table 50-1: Market for Fried Twinkies) The government decides to tax fried Twinkies at a rate of \$0.30 per Twinkie and collect that tax from the producers. Using the table, the consumers will pay \_\_\_\_\_ per Twinkie and buy \_\_\_\_\_ Twinkies after the tax.
- \$1.20; 8,000

- b. \$1.30; 7,000
  - c. \$1.40; 6,000
  - d. \$1.50; 5,000
  - e. \$1.10; 9,000
38. (Table 50-1: Market for Fried Twinkies) From the table, of the \$0.30 tax per fried Twinkie, consumers actually pay \_\_\_\_\_, while producers actually pay \_\_\_\_\_.
- a. \$0.30; \$0.00
  - b. \$0.15; \$0.15
  - c. \$0.20; \$0.10
  - d. \$0.00; \$0.30
  - e. \$0.10; \$0.20
39. If the demand curve is downward-sloping and supply is perfectly elastic, then the burden of an excise tax is:
- a. borne entirely by consumers.
  - b. borne entirely by producers.
  - c. shared by consumers and producers, with the burden falling mainly on consumers.
  - d. shared by consumers and producers, with the burden falling mainly on producers.
  - e. shared by consumers and producers, with the burden split equally.

**Figure 50-1: Market for Lattes**



40. (Figure 50-1: Market for Lattes) If, in the market for lattes shown in the figure, the government assesses a tax of \$0.75 on each latte, the price the consumer pays for a latte after the tax will:
- a. increase from \$2 to \$2.75.
  - b. increase from \$2 to \$2.50.
  - c. increase from \$2 to \$2.25.
  - d. increase from \$2 to \$3.00.
  - e. decrease from \$2 to \$1.25.
41. (Figure 50-1: Market for Lattes) If, in the market for lattes shown in the figure, the government assesses a tax of \$0.75 on sellers of lattes, the price the producer will receive for a latte after the tax will:
- a. decrease from \$2 to \$1.75.
  - b. decrease from \$2 to \$1.50.
  - c. decrease from \$2 to \$1.25.
  - d. increase from \$2 to \$2.50.
  - e. remain at \$2.

42. Suppose the price elasticity of demand for yachts equals 4.04, while the price elasticity of supply for yachts equals 0.22. If Congress reinstates a luxury tax on yachts, how will the burden of the tax be divided?
- Yacht buyers will pay the entire tax while yacht builders will pay no tax at all.
  - Yacht buyers will pay a larger share than yacht builders.
  - Yacht builders and buyers will pay an equal share.
  - Yacht builders will pay the entire tax while yacht buyers will pay no tax at all.
  - Yacht builders will pay a larger share than yacht buyers.
43. An excise tax is a tax charged on:
- imports
  - earnings.
  - the ownership of real estate.
  - the inheritance of assets.
  - each unit of a good or service that is sold.
44. Which of the following goods is most likely to display increasing marginal utility over some range?
- chicken during the 1920s, when it was considered a luxury good
  - paint, because you need an amount sufficient to paint at least one entire room
  - lobsters, which are so expensive that you must eat two to get your money's worth
  - peanut butter and jelly sandwiches
  - cups of coffee.
45. The marginal utility of coffee consumption for Steve is the change in \_\_\_\_\_ generated by consuming an additional unit of coffee.
- total utility
  - total consumption
  - total demand
  - price
  - marginal demand

Units of Good X	Marginal Utility Good X	Units of Good Y	Marginal Utility Good Y
1	20	1	12
2	16	2	10
3	12	3	8
4	8	4	6
5	4	5	4
6	0	6	2
<b>Table 51-5: Consumer Equilibrium</b>			

46. (Table 51-5: Consumer Equilibrium) Assume that the price of both goods is \$1 per unit, and you consume 3 units of Good X and 3 units of Good Y. To maximize utility, assuming that the goods are divisible, you would consume:
- less of both X and Y.
  - more of both X and Y.
  - less of X and more of Y.
  - more of X and less of Y.
  - the current quantity of both goods.
47. (Table 51-5: Consumer Equilibrium) Assume that the price of both goods is \$1 per unit, and you consume 4 units of Good X and 2 units of Good Y. To maximize utility, assuming that the goods are divisible, you would consume:
- less of X and more of Y.
  - more of both X and Y.
  - less of both X and Y.

- d. more of  $X$  and less of  $Y$ .
  - e. the current quantity of both goods.
48. (Table 51-5: Consumer Equilibrium) Assume that the price of Good  $X$  is \$2 per unit and the price of Good  $Y$  is \$1 per unit, and you consume 3 units of Good  $X$  and 3 units of Good  $Y$ . To maximize utility, assuming that the goods are divisible, you would consume:
- a. less of both  $X$  and  $Y$ .
  - b. more of both  $X$  and  $Y$ .
  - c. less of  $X$  and more of  $Y$ .
  - d. more of  $X$  and less of  $Y$ .
  - e. the current quantity of both goods.