Midpoint Elasticity Formula: \[ E_p = \frac{(Q_2 - Q_1) / [(Q_2 + Q_1) / 2]}{(P_2 - P_1) / [(P_2 + P_1) / 2]} \]

**Multiple Choice (40 questions)**

Identify the best answer. Turn cell phones off (if your phone rings during the test you will be ineligible to answer the extra credit question).

____ 1. An inelastic demand means that
   a. consumers hardly respond to a change in price.
   b. consumers respond substantially to a change in price.
   c. consumers respond directly to a change in income.
   d. the change in quantity demanded is equal to the change in price.

____ 2. A person with high cholesterol must exercise an hour every day has what type of demand for exercise equipment?
   a. elastic
   b. unit elastic
   c. inelastic
   d. weak

____ 3. When the price of bubble gum is $0.50, the quantity demanded is 400 packs per day. When the price falls to $0.40, the quantity demanded increases to 600. Given this information and using the midpoint method, you know that the demand for bubble gum is
   a. inelastic.
   b. elastic.
   c. unit elastic.
   d. perfectly inelastic.

____ 4. If the price elasticity of demand for beer is -0.9, thus a 10 percent increase in price of beer would result in a
   a. 0.9 percent decrease in the quantity demanded.
   b. 10 percent decrease in the quantity demanded.
   c. 9 percent decrease in the quantity demanded.
   d. 90 percent decrease in the quantity demanded.

____ 5. Demand is elastic if elasticity (in absolute value) is
   a. less than 1.
   b. equal to 1.
   c. equal to 0.
   d. greater than 1.

____ 6. In the case of perfectly inelastic demand,
   a. quantity demanded stays the same regardless of price changes.
   b. huge changes in quantity demanded result from very small changes in the price.
   c. the change in quantity demanded exactly equals the change in price.
   d. the change in quantity demanded will be twice the change in price.

____ 7. If an increase in income results in a decrease in the quantity demanded of a good, then the good is
   a. an inferior good.
   b. a necessary good.
   c. an inelastic demand good.
   d. a luxury good.
8. Refer to Figure 5-5. Total revenue at a price of $30 would be
   a. $9,000.
   b. $7,000.
   c. $5,000.
   d. $3,000.

9. Refer to Figure 5-5. Lowering price from $30 to $20 would
   a. increase total revenue by $2,000.
   b. decrease total revenue by $2,000.
   c. increase total revenue by $1,000.
   d. decrease total revenue by $1,000.

10. An increase in price causes an increase in total revenue when
    a. demand is elastic.
    b. demand is inelastic.
    c. demand is unit elastic.
    d. All of the above are possible.

11. Janine would be willing to pay $50 to see Les Misérables, but buys a ticket for only $30. Janine values the performance at
    a. $20.
    b. $30.
    c. $50.
    d. $80.

12. Which of the following would probably have the most inelastic demand?
    a. cigarettes
    b. insulin
    c. apples
    d. paper towels

13. Last year, Sheila bought 6 pairs of shoes when her income was $40,000. This year, her income is $44,000 and she purchased 10 pairs of shoes. All else constant, it is obvious that Sheila
    a. considers shoes to be a luxury good.
    b. considers shoes to be an inferior good.
    c. considers shoes to be a necessary good.
    d. Considers shoes to be a price inelastic good.
14. You and your college roommate eat three packages of Ramen noodles each week. After graduation last month, both of you were hired at several times your college income. You still enjoy Ramen noodles very much and buy even more, but your roommate plans to buy other foods she prefers more. When looking at income elasticity of demand for Ramen noodles, yours would
   a. be negative and your roommate's would be positive.
   b. be positive and your roommate's would be negative.
   c. be zero and your roommate's would approach infinity.
   d. approach infinity and your roommate's would be zero.

15. If two goods are substitutes, their cross-price elasticity will be
   a. positive.
   b. negative.
   c. zero.

16. The price elasticity of supply measures how responsive
   a. sellers are to a change in price.
   b. buyers are to a change in income.
   c. buyers are to a change in price.
   d. sellers are to a change in buyers' income.

17. A legal maximum price at which a good can be sold is a price
   a. floor.
   b. stabilization.
   c. support.
   d. ceiling.

**Figure 6-2**

18. Refer to Figure 6-2. If the government imposes a **price ceiling** at $14, what will be the price of this good?
   a. $14.00.
   b. $12.00.
   c. $10.00.
   d. $8.00.

19. Refer to Figure 6-2. If the government imposes a **price floor** at $14, the result would be a(n)
   a. surplus of 20.
   b. surplus of 40.
   c. shortage of 20.
   d. shortage of 40.
   e. equilibrium (neither a shortage or surplus).
20. In the housing market, rent controls cause quantity supplied to
a. fall and quantity demanded to fall.
b. fall and quantity demanded to rise.
c. rise and quantity demanded to fall.
d. rise and quantity demanded to rise.

21. In rent control, landlords cease to be responsive to tenants' concerns about the quality of the housing because
a. with shortages and waiting lists, there is no incentive to maintain and improve the property
b. they know they can never please their tenants.
c. the law no longer requires them to maintain their buildings.
d. it becomes the government's responsibility.

22. When government imposes price ceilings and floors in a market
a. price no longer serves as a rationing device.
b. efficiency in the market is increased.
c. shortages and surpluses are eliminated.
d. buyers and sellers are both better off.

23. A tax on the buyers of coffee will
a. reduce the equilibrium price of coffee, and increase the equilibrium quantity.
b. increase the equilibrium price of coffee, and reduce the equilibrium quantity.
c. increase the equilibrium price of coffee, and increase the equilibrium quantity.
d. reduce the equilibrium price of coffee, and reduce the equilibrium quantity.

24. A tax on tea sellers will cause the price the buyer pays
a. and the price that the seller receives (after paying the tax bill) to rise.
b. and the price that the seller receives (after paying the tax bill) to fall.
c. to rise and the price that the seller receives (after paying the tax bill) to fall.
d. to fall and the price that the seller receives (after paying the tax bill) to rise.

25. Which is the most correct statement about the burden of a tax imposed on buyers of sugar?
a. Buyers bear the entire burden of the tax.
b. Sellers bear the entire burden of the tax.
c. Buyers and sellers share the burden of the tax.
d. The government bears the entire burden of the tax.

26. If a tax is imposed on a market with elastic demand,
a. buyers will bear most of the burden of the tax.
b. sellers will bear most of the burden of the tax.
c. the burden of the tax will be shared equally between buyers and sellers.

27. A tax on the sellers of a product will shift the
a. supply curve down.
b. supply curve up.
c. demand curve up.
d. demand curve down.

28. Consumer surplus is
a. a buyer's willingness to pay minus the price.
b. a buyer's willingness to pay plus the price.
c. the price of the product minus the buyer's willingness to pay.
d. when the buyer's willingness to pay and the price of the product are equal.

29. If a consumer is willing and able to pay $15.00 for a good but the price is $17.00, then the
a. consumer would have consumer surplus of $2.00.
b. consumer would increase his/her willingness and ability to pay by earning more.
c. consumer would not purchase the good and would not have any consumer surplus.
d. market must not be a perfectly competitive market.
30. Cameron visits a sporting goods store to buy a new set of golf clubs. He is willing to pay $750 for the clubs, but buys them on sale for $575. Cameron's consumer surplus from the purchase is
a. $175.
b. $575.
c. $750.
d. $1,325.

31. Suppose there is an early freeze in California that ruins the lemon crop. What happens to consumer surplus in the market for lemons?
a. It increases.
b. It decreases.
c. It is not affected by this change in market forces.
d. It increases very briefly then decreases.

This table refers to five possible buyers' willingness to pay for a case of Vanilla Coke.

<table>
<thead>
<tr>
<th>BUYER</th>
<th>WILLINGNESS TO PAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAVID</td>
<td>$8.50</td>
</tr>
<tr>
<td>LAURA</td>
<td>$7.00</td>
</tr>
<tr>
<td>MEGAN</td>
<td>$5.50</td>
</tr>
<tr>
<td>MALLORY</td>
<td>$4.00</td>
</tr>
<tr>
<td>AUDREY</td>
<td>$3.50</td>
</tr>
</tbody>
</table>

32. Refer to Table 7-2. If the price of Vanilla Coke is $6.90, who will purchase the good?
a. All five would purchase Vanilla Coke, just in different amounts.
b. Megan, Mallory and Audrey
c. David, Laura and Megan
d. David and Laura

33. Refer to Figure 7-4. What area represents producer surplus when the price is $P_1$?
a. A
b. B
c. C
d. D
34. Refer to Figure 7-4. What area represents total surplus in the market when the price is $P_1$?
   a. A + B
   b. B + C
   c. C + D
   d. A + B + C + D

35. Producer surplus equals
   a. Value to buyers - Amount paid by buyers.
   b. Amount received by sellers - Costs of sellers.
   c. Value to buyers - Costs of sellers.
   d. Value to buyers - Amount paid by buyers + Amount received by sellers - Costs of sellers.

The following table represents the costs of five possible sellers.

<table>
<thead>
<tr>
<th>SELLER</th>
<th>COST</th>
</tr>
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<tbody>
<tr>
<td>DALE</td>
<td>$1,500</td>
</tr>
<tr>
<td>JILL</td>
<td>$1,200</td>
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<tr>
<td>DENISE</td>
<td>$1,000</td>
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<tr>
<td>CATHERINE</td>
<td>$750</td>
</tr>
<tr>
<td>JACKSON</td>
<td>$500</td>
</tr>
</tbody>
</table>

36. Refer to Table 7-3. If the market price is $1,000, the producer surplus in the market would be
   a. $700.
   b. $750.
   c. $2,250.
   d. $3,700.

37. We can say that the allocation of resources is efficient if
   a. producer surplus is maximized.
   b. consumer surplus is maximized.
   c. total surplus is maximized.
   d. None of the above are correct.

38. In a market, total surplus is
   a. equal to producer surplus plus consumer surplus.
   b. equal to the total costs to sellers less the total value to buyers.
   c. equal to consumers' willingness to pay plus producer costs.
   d. greater than consumer surplus plus producer surplus.

39. If the state of North Carolina increases the beer tax by 10 cents per six pack of beer, what do you think will happen to the price that North Carolina consumers will pay for six-packs of beer?
   a. The price will increase by 10 cents
   b. The price will increase by more than 10 cents
   c. The price will increase by less than 10 cents
   d. The price will decrease by 10 cents
40. Refer to Figure 7-8. At the market-clearing equilibrium, the consumer surplus is represented by the area
a. A.
b. A + B + C.
c. D + E + F.
d. A + B + C + D + E + F.

41. Extra Credit: *(Did your cell phone ring since Test #1? If so, you are ineligible to answer this question)*.
Select the person who is “unemployed”:
A. Anna: Who is unhappy in her current job.
B. Bob: Who spends all of his time at home taking care of his elderly parents.
C. Cindy: Who doesn’t currently have a job and checks the classifieds each week.
D. Ricky Williams: Who “retired” from the Miami Dolphins and now spends his time camping in a tent and smoking dope in Australia.

Have a good Fall Break, you deserve it 😊
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