Name: $\qquad$ R Number: $\qquad$ Roster \#: $\qquad$

Use the following to answer question 1 :
Figure: Consumer Surplus


1. (Figure: Consumer Surplus) In the figure, when the price falls from $\$ 30$ to $\$ 25$, consumer surplus $\qquad$ for a total consumer surplus of $\qquad$ .
A) increases by $\$ 25$; $\$ 74$
B) decreases by $\$ 15 ; \$ 34$
C) increases by $\$ 15$; $\$ 64$
D) increases by $\$ 5 ; \$ 54$

Use the following to answer question 2 :
Figure: Consumer Surplus III

2. (Figure: Consumer Surplus III) If the price of the good decreases from $\$ 2$ to $\$ 1$, consumer surplus will increase by:
A) $\$ 5$.
B) $\$ 10$.
C) $\$ 25$.
D) $\$ 35$.
3. Vonda and Aleiyah are shopping together at the mall for new jeans. Vonda is willing to pay $\$ 90$ and Aleiyah is willing to pay $\$ 50$ for a pair of jeans. What is the gain in total consumer surplus when the price decreases from $\$ 59$ to $\$ 40$ ?
A) $\$ 10$
B) $\$ 29$
C) $\$ 31$
D) $\$ 60$

Use the following to answer question 4:
Figure: Producer Surplus

4. (Figure: Producer Surplus) When the price rises from $\$ 25$ to $\$ 35$, producer surplus
$\qquad$ for a total producer surplus of $\qquad$ .
A) increases by $\$ 10 ; \$ 30$
B) decreases by $\$ 10 ; \$ 30$
C) increases by $\$ 30 ; \$ 60$
D) decreases by $\$ 35 ; \$ 100$
5. The total producer surplus for a good can be calculated in all except one of the following ways. Which is the exception?
A) the sum of the individual producer surpluses for all sellers of the good
B) the area below the supply curve for the good up to the quantity of the good sold
C) the area above the supply curve and below the price at which the good is being sold
D) the sum, for all sellers of the good, of the difference between what each seller receives and the minimum amount he or she is willing to accept for selling the good
6. If the cost to download a song from the Internet onto an MP3 player falls from $\$ 0.99$ to $\$ 0.50$, then we would predict that producer surplus would $\qquad$ in the market for MP3 players.
A) increase
B) decrease
C) not change
D) We cannot determine what producer surplus will do without information about consumer surplus.
7. Mountain River Adventures offers white water rafting trips down the Colorado River. It costs the firm $\$ 100$ for the first raft trip per day, $\$ 120$ for the second, $\$ 140$ for the third, and $\$ 160$ for the fourth. If the market price for a raft trip was $\$ 120$ but has now increased to $\$ 150$, the gain in producer surplus is equal to:
A) $\$ 20$.
B) $\$ 70$.
C) $\$ 80$.
D) $\$ 90$.
8. The price elasticity of demand can be found by:
A) examining only the slope of the demand curve.
B) measuring absolute changes in price and quantity demanded.
C) comparing the percentage change in quantity demanded to the percentage change in price.
D) knowing that when price changes, the quantity demanded goes in the opposite direction.

Use the following to answer question 9:

## Table: Producer Surplus

| Student | Willingness to Sell |
| :--- | :---: |
| Tim | $\$ 1$ |
| Laura | 30 |
| Whitney | 50 |
| Ralph | 100 |
| Rick | 150 |

9. (Table: Producer Surplus and Phantom Tickets) Given the information in the table, if the price for Phantom tickets is $\$ 55$, total producer surplus for the five students is:
A) $\$ 54$.
B) $\$ 79$.
C) $\$ 84$.
D) $\$ 64$.
10. If a frost destroys much of the grapefruit crop, total surplus:
A) will increase.
B) will decrease.
C) will not change.
D) may change, but we cannot determine the change without more information.
11. Each month Jessica buys exactly 15 Big Macs regardless of the price. Jessica's price elasticity of demand for Big Macs is:
A) 0 .
B) 1 .
C) greater than 1 .
D) less than 1 , but greater than 0 .
12. In the market for computers, if the demand curve is elastic and the price of a computer decreases, we would expect total revenue to $\qquad$ . If the demand curve is inelastic and the price of a computer decreases, we would expect total revenue to $\qquad$ _.
A) increase; decrease
B) increase; increase
C) decrease; increase
D) decrease; decrease
13. If the price of a good rises, then producer surplus:
A) will increase.
B) will decrease.
C) will remain the same.
D) may change but we can't tell how.
14. If the estimated price elasticity of demand for foreign travel is 4 , then:
A) a $20 \%$ decrease in the price of foreign travel will increase quantity demanded by $80 \%$.
B) demand for foreign travel is inelastic.
C) a $10 \%$ increase in the price of foreign travel will increase quantity demanded by $40 \%$.
D) a $20 \%$ increase in the price of foreign travel will increase quantity demanded by $80 \%$.
15. Suppose the price of barley increases by $16.53 \%$. If breweries buy $3.28 \%$ less barley after the price increase, the total revenue for barley producers will $\qquad$ due to the
$\qquad$ effect being greater than the $\qquad$ effect.
A) decrease; quantity; price
B) increase; price; quantity
C) not change; quantity; price
D) increase; quantity; price

Use the following to answer question 16:
Figure: Linear Demand Curve

16. (Figure: Linear Demand Curve) If the price is initially $\$ 10$, then falls to $\$ 9$, this will result in a(n):
A) decrease in quantity demanded and a decrease in total revenue.
B) decrease in quantity demanded and an increase in total revenue.
C) increase in quantity demanded and a decrease in total revenue.
D) increase in quantity demanded and an increase in total revenue.
17. Kayla and Jada are roommates in New York City. Both Kayla and Jada recently received raises. Kayla now buys more CDs than before, but Jada buys fewer. Kayla behaves as if CDs are $\qquad$ goods and Jada's income elasticity of demand for CDs is $\qquad$ _.
A) normal; positive
B) normal; negative
C) inferior; positive
D) inferior; negative
18. Suppose the government decides to fight obesity in America by imposing an excise tax on the saturated fat content of food. The effect of this tax would be to:
A) lower the profits of ice cream suppliers.
B) decrease revenue for the government.
C) decrease black market activity.
D) raise the profits of ice cream suppliers.
19. If a local California avocado stand operates in a perfectly competitive market, that stand owner will be a:
A) price-maker.
B) price-taker.
C) price-discriminator.
D) price-maximizer.

## Bonus Question (10 Points):

Who was awarded the Nobel Prize in Economics at 2013 ?

Use the following to answer question 20:
Figure: Demand for Notebook Computers

20. (Figure: Demand for Notebook Computers) The change in the firm's total revenue resulting from a change in price from $P$ to $T$ suggests that demand is:
A) nonelastic.
B) price-elastic.
C) price-inelastic.
D) price unit-elastic.

Use the following to answer question 21:

## Figure: Gain in Consumer Surplus


21. (Figure: Gain in Consumer Surplus) Identify the area(s) that represent the gain in consumer surplus to those consumers already participating in the market when the price falls from $P_{1}$ to $P_{2}$. Which of the following is correct?
A) A and B
B) B
C) B and C
D) C

Use the following to answer question 22:

## Figure: Wireless Mouse Market


22. (Figure: 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) $\$ 3,000$

Use the following to answer question 23:
Figure: Consumer and Producer Surplus

23. (Figure: Consumer and Producer Surplus) In the figure, if an effective price ceiling exists in this market, then producer surplus $\qquad$ and total surplus $\qquad$ .
A) decreases; decreases
B) increases; stays the same
C) decreases; stays the same
D) increases; decreases

Use the following to answer question 24:

## Figure: Market I


24. (Figure: Market I) If the government decides to restrict the quantity that is sold to 100 , which of the following is not a true statement?
A) Total surplus will fall by areas C and E .
B) The market is not at equilibrium.
C) Consumer surplus is maximized.
D) Mutually beneficial transactions have been missed.

Use the following to answer question 25 :
Figure: Market I

25. (Figure: Market I) In reference to the graph, which of the following statements is correct?
A) The demand schedule is less elastic when the price increases from $\$ 4$ to $\$ 6$ than when it increases from $\$ 6$ to $\$ 8$.
B) The demand schedule is more elastic when the price increases from $\$ 4$ to $\$ 6$ than when it increases from $\$ 6$ to $\$ 8$.
C) The demand schedule has the same elasticity when the price increases from $\$ 4$ to $\$ 6$ than when it increases from $\$ 6$ to $\$ 8$.
D) The demand schedule is unit elastic when the price increases from $\$ 4$ to $\$ 6$ and when it increases from $\$ 6$ to $\$ 8$.
26. Suppose the absolute value of the price elasticity of demand for blueberries is 1.5. If climate change destroys one-fourth of the nation's blueberry crop (and thus reduces supply), how will that affect total revenue, all other things unchanged? (Hint: Consider which direction blueberry prices will go.)
A) Total revenue will rise.
B) Total revenue will fall.
C) Total revenue will remain unchanged.
D) Not enough information is given to answer the question.
27. The income elasticity of demand for peaches has been estimated to be 1.43. If income grows by $15 \%$ in a period, how will that affect total revenue from peaches in that period, all other things unchanged?
A) Total revenue will rise.
B) Total revenue will fall.
C) Total revenue will remain unchanged.
D) Not enough information is given to answer the question.
28. Which of the following would be most likely to have a vertical supply curve?
A) salt
B) oil
C) insulin
D) paintings by Van Gogh

Use the following to answer question 29:
Figure: Gains from Trade

29. (Figure: Gains from Trade) If the government imposes a tax of $\$ 3$ in this market, the deadweight loss will equal:
A) $\$ 0$.
B) $\$ 22.50$.
C) $\$ 26.25$.
D) $\$ 52.50$.
30. All except one of the following are characteristics of perfect competition. Which is the exception?
A) All firms produce the same standardized product.
B) There are many producers and each has only a small market share.
C) There are many producers; one firm has a $25 \%$ market share, and all the remaining firms have a market share of less than $2 \%$ each.
D) There are no obstacles to entry into or exit from the industry.

## Question (10 points):

## Determine the amount of producer surplus generated in each of the following situations.

a. (3 points) Gordon lists his old Lionel electric trains on eBay. He sets a minimum acceptable price, known as his reserve price, of $\$ 75$. After five days of bidding, the final high bid is exactly $\$ 75$. He accepts the bid.
b. (3 points) So-Hee advertises her car for sale in the used - car section of the student newspaper for $\$ 2,000$, but she is willing to sell the car for any price higher than $\$ 1,500$. The best offer she gets is $\$ 1,200$, which she declines.
c. (4 points) Sanjay likes his job so much that he would be willing to do it for free. However, his annual salary is $\$ 80,000$.

## Answer:

