

Name: _____ Date: _____

1. The ability-to-pay principle says that:
 - A) the amount of tax paid depends on the measure of value.
 - B) those that benefit from public spending should bear the burden of the tax that pays for that spending.
 - C) those with greater ability to pay should pay more tax.
 - D) those that benefit from the tax should pay the same percentage of the tax base as those who do not benefit.

2. If an excise tax is imposed on automobiles and collected from consumers,:
 - A) the demand curve will shift downward by the amount of the tax.
 - B) the supply curve will shift upward by the amount of the tax.
 - C) the equilibrium quantity supplied will increase relative to the pre-tax level.
 - D) the equilibrium quantity demanded will increase relative to the pre-tax level.

3. If the government imposes a \$5 excise tax on the sale of leather shoes collected from the supplier and the price of leather shoes increases by \$2,:
 - A) the government will receive less tax revenue than anticipated.
 - B) consumers are paying more of the tax than the producers.
 - C) producers are paying more of the tax than are the consumers.
 - D) the quantity of shoes sold will increase.

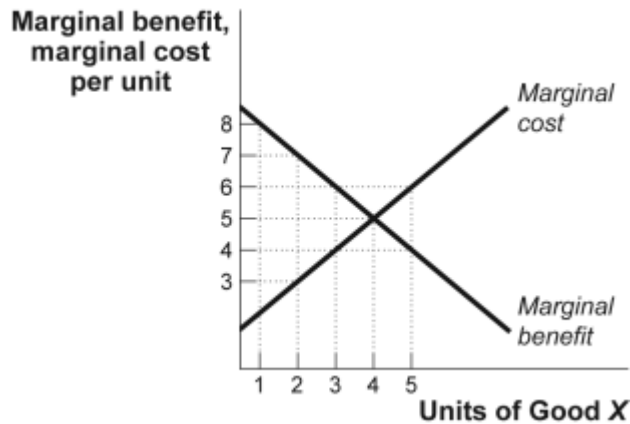
4. Excise taxes that raise the most revenue and cause the least deadweight loss are likely to be those that are imposed on goods for which:
 - A) demand is inelastic and supply is elastic.
 - B) demand and supply are both inelastic.
 - C) demand is elastic and supply is inelastic.
 - D) demand and supply are both elastic.

5. Which of the following taxes reflects the ability-to-pay principle?
 - A) the federal income tax
 - B) the payroll tax
 - C) a sales tax on food
 - D) Social Security tax

6. Which of the following taxes best illustrates the benefits principle of tax fairness?
- A) The local city playground is funded through a tax on all citizens.
 - B) Roads and highways are built and maintained through revenue from a tax on gasoline.
 - C) A property tax that is proportional to the value of the home is charged to homeowners to fund K–12 education.
 - D) A sales tax on food pays for police and fire protection.
7. You are the CEO of a company. You have an opportunity to undertake the following project: pay \$1,000 today and receive \$1,200 a year from now. If the interest rate is 20%, the net present value of the project is:
- A) \$440.
 - B) \$200.
 - C) \$166.
 - D) \$0.
8. Which of the following statements about opportunity cost is *not* true?
- A) Opportunity cost may be larger than monetary cost.
 - B) Opportunity cost includes both explicit and implicit costs.
 - C) The real or opportunity cost of something is what you must give up to get it.
 - D) The term *opportunity cost* is synonymous with explicit costs.
9. You own a small deli that sells sandwiches, salads, and soup to the community. Which of the following is an implicit cost of the business?
- A) wages paid to part-time employees
 - B) the job offer you did not accept at a local catering service
 - C) bread, meat, and vegetables used to produce the items on your menu
 - D) your monthly utility bill

Use the following to answer question 10:

Figure: Marginal Analysis of Good X



10. (Figure: Marginal Analysis of Good X) You are considering consuming units of Good X. The graph represents your marginal benefit and marginal cost curves. If you consume the fifth unit of Good X, you will experience a net change in total benefit equal to:
- A) \$0.
 - B) -\$2.
 - C) \$2.
 - D) \$4.
11. A semiconductor firm is considering opening a new plant. The plant will generate profits of \$100 million for each of the next 3 years (but no profits this year), at which point the technology will be obsolete. If the interest rate is 10%, what is the maximum cost (to the nearest million) the firm is willing to pay now for the plant?
- A) \$300 million
 - B) \$249 million
 - C) \$273 million
 - D) \$100 million
12. Total net gain is maximized when marginal benefit _____ marginal cost.
- A) exceeds
 - B) is less than
 - C) is equal to
 - D) approaches

Use the following to answer question 13:

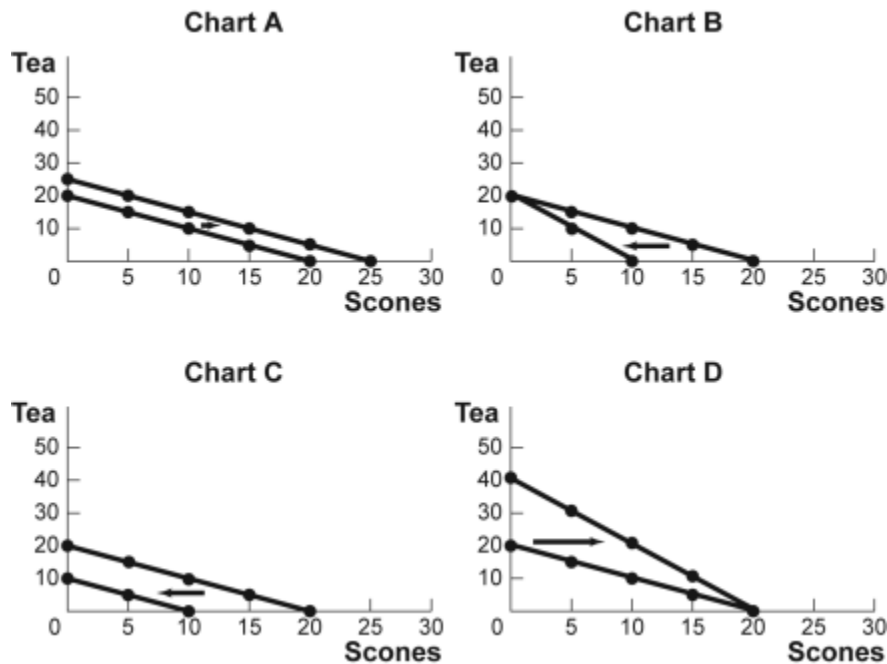
Table: Exercise and Total Utility

Hours of Exercise	Total Utility
0	0
1	5
2	15
3	23
4	29
5	33

13. (Table: Exercise and Total Utility) The table shows a consumer's total utility from consuming hours of exercise at the gym. The principle of diminishing marginal utility is seen:
- A) nowhere, as marginal utility is always increasing.
 - B) immediately, when the consumer exercises from the very first hour and beyond.
 - C) when the consumer exercises between the first and second hours.
 - D) when the consumer exercises more than two hours.

Use the following to answer question 14:

Figure: Budget Lines for Tea and Scones

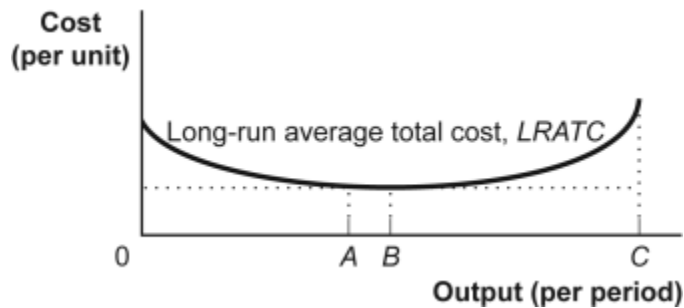


14. (Figure: Budget Lines for Tea and Scones) For months now, Agnes has had \$20 per month to spend on tea and scones. The price of each cup of tea and each scone is \$1. Which of the charts in the figure shows what will happen to her budget line if her income increases to \$25?
- A) Chart A
 - B) Chart B
 - C) Chart C
 - D) Chart D
15. The price of popcorn is \$0.50 per box and the price of peanuts is \$0.25 per bag, and you have \$5 to spend. You decide to purchase 8 boxes of popcorn. The maximum quantity of peanuts that you can purchase is _____ bags.
- A) 4
 - B) 8
 - C) 10
 - D) 12
16. Joseph consumes pizza and soda. He is currently consuming three units of pizza and two units of soda. The price of pizza is \$5 and the price of soda is \$1. If he is consuming the optimal consumption bundle and his marginal utility of pizza is 50, then his marginal utility of soda is:
- A) 50.
 - B) 10.
 - C) 5.
 - D) impossible to determine unless you know Joseph's income.
17. John Smedley, a careful maximizer of utility, consumes only two goods, peanut butter and broccoli. He had just achieved the utility-maximizing solution in his consumption of the two goods when the price of broccoli rose. As he adjusts to this event, he will consume:
- A) more peanut butter and less broccoli.
 - B) less peanut butter and less broccoli.
 - C) more peanut butter and more broccoli.
 - D) less peanut butter and more broccoli.

18. Marge has spent her entire budget on milk and cookies. The last glass of milk provided Marge with 10 additional utils and the last cookie provided her with 25 additional utils. The price of a cookie is twice the price of a glass of milk. Given this information, Marge should:
- A) increase her consumption of milk and decrease her consumption of cookies.
 - B) decrease her consumption of milk and increase her consumption of cookies.
 - C) increase her consumption of milk and increase her consumption of cookies.
 - D) decrease her consumption of milk and decrease her consumption of cookies.
19. In the long run:
- A) all inputs are fixed.
 - B) inputs are neither variable nor fixed.
 - C) at least one input is variable and one input is fixed.
 - D) all inputs are variable.
20. At 36 units of labor, a firm finds that both average product of labor and marginal product of labor equal 42. We can conclude that the average product curve at 36 units of labor is:
- A) upward-sloping.
 - B) downward-sloping.
 - C) vertical.
 - D) horizontal.
21. If Jakob knows the marginal cost of producing the seventh sports jersey is \$21, then the total cost of seven sports jerseys is:
- A) \$21.
 - B) \$60.
 - C) \$147.
 - D) The answer cannot be determined from the information provided.
22. Average total cost is:
- A) the change in variable cost divided by the change in quantity.
 - B) total cost divided by quantity.
 - C) the change in quantity divided by the change in labor costs.
 - D) total cost times quantity.

Use the following to answer question 23:

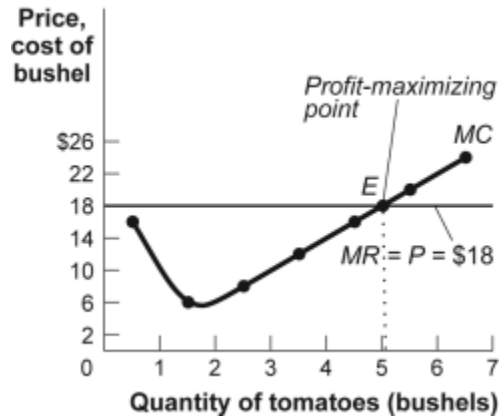
Figure: Long-Run Average Cost



23. (Figure: Long-Run Average Cost) Output per period in the region A to B indicates that a firm is experiencing:
- A) constant returns to scale.
 - B) economies of scale.
 - C) diseconomies of scale.
 - D) constant total cost as output increases.
24. Diminishing returns is a reason why:
- A) the marginal cost curve is downward-sloping.
 - B) fixed costs remain constant.
 - C) the marginal cost curve is upward-sloping.
 - D) the average fixed cost curve is downward-sloping.
25. The assumptions of perfect competition imply that:
- A) individuals in the market accept the market price as given.
 - B) individuals can influence the market price.
 - C) the price will be a fair price.
 - D) the price will be low.
26. Zoe's Bakery operates in a perfectly competitive industry. Suppose that when the market price is \$5, the profit-maximizing output level of pastries is 150 units, with average total cost of \$4, and average variable cost of \$3. From this we know Zoe's marginal cost is _____, and her short-run profits are _____.
- A) \$5; \$150
 - B) \$5; \$300
 - C) \$1; \$150
 - D) \$1; \$300

Use the following to answer question 27:

Figure: Marginal Revenue, Costs, and Profits



27. (Figure: Marginal Revenue, Costs, and Profits) In the figure, if market price increases to \$20, marginal revenue _____ and profit-maximizing output _____.
- A) increases; increases
 - B) increases; decreases
 - C) decreases; increases
 - D) decreases; decreases

Use the following to answer question 28:

Table: Total Cost for a Perfectly Competitive Firm

Quantity per Period	Total Cost
0	\$10
1	16
2	20
3	22
4	24
5	25
6	27
7	30
8	34
9	39
10	45

28. (Table: Total Cost for a Perfectly Competitive Firm) If the market price is \$4.50, the profit-maximizing quantity of output is _____ units.
- A) five
 - B) seven
 - C) eight
 - D) nine
29. In the short run, if $AVC < P < ATC$, a perfectly competitive firm:
- A) produces output and earns an economic profit.
 - B) produces output and incurs an economic loss.
 - C) does not produce output and earns an economic profit.
 - D) does not produce output and earns zero economic profit.
30. Which of the following is most likely to cause firms to exit a perfectly competitive industry?
- A) Consumer tastes and preferences for this product get stronger.
 - B) A technological advance allows all firms to produce more efficiently.
 - C) The price of a key variable input falls.
 - D) Consumer income falls.

Part II: Problem

31. You are given the following table incomplete information for a perfectly competitive firm.
Use the available information to fill in the blanks.

Output	VC	TC	AVC	AFC	ATC	MC	P	TR	Profit
0		100	---	---	---	---	50		
1	25							50	
2						20			
3					53.3				
4			17.5						

Hint: What are fixed costs equal to?