

Problem Set 1: Economic Foundations

1. Economics is _____.
 - a. the scientific study of the human mind and its functions, especially those affecting behavior in a given context.
 - b. the study of human societies and cultures and their development.
 - c. the study of how people make decisions in the face of scarcity and the impact of such decisions on both the individual and the society as a whole.
 - d. the study of the fundamental nature of knowledge, reality, and existence.

2. _____ is the branch of economics which studies how individual decision-makers behave and interact with each other.
 - a. Microeconomics
 - b. Macroeconomics
 - c. Cost-Benefit Analysis
 - d. Surplus Maximization

3. _____ is the branch of economics which studies the functioning and performance of a society's economy as a whole.
 - a. Microeconomics
 - b. Macroeconomics
 - c. Cost-Benefit Analysis
 - d. Surplus Maximization

4. The following question is an example for which branch of economics?
"Who gets to drive the car to work in the morning?"
 - a. Microeconomics
 - b. Macroeconomics
 - c. Cost-Benefit Analysis
 - d. Surplus Maximization

5. Positive statements _____.
 - a. End with a smiley face.
 - b. Attempt to describe how the world actually is or actually functions.
 - c. Can be shown to be true, given enough research, evidence, and data.
 - d. Both b. and c.

6. Normative statements _____.
 - a. End with an exclamation mark.
 - b. Attempt to assess the desirability of how the world is or functions.
 - c. Are scientific in nature.
 - d. Are explicitly or implicitly supported by data.

7. Which of the following statements is a positive statement?
- Wenzhou-Kean University went into full operation in 2014.
 - The production, possession, and consumption of all types of alcohol should be illegal.
 - The United States would be a better place to live if we decreased spending on national defense and increased spending on education.
 - More than one of the above answers is correct.
8. Consider the following two statements:
- (1) A ceiling on rents reduces the quantity of available housing.
(2) A ceiling on rents is the best solution when rents are high.
- Statement (1) is normative and statement (2) is positive.
 - Both statements (1) and (2) are normative.
 - Statement (1) is positive and statement (2) is normative.
 - Both statements (1) and (2) are positive.
9. A rational decision maker _____.
- Consumes as long as the marginal benefit from consumption is at least as great as the marginal cost of consumption.
 - Consumes as long as the marginal cost of consumption is at least as great as the marginal benefit from consumption.
 - Consumes when total economic surplus is negative.
 - Consumes when total benefit is lower than total cost.
10. According to the U.S. Bureau of labor statistics, in 2018 the unemployment rate among high school graduates was 1.5% lower than among non-high school graduates. If there would not have been a difference, then we would expect _____.
- More people drop out of school before graduating high school.
 - Less people drop out of school before graduating high school.
 - That nobody would change their behavior.
 - None of the above.
11. According to the U.S. Bureau of labor statistics, in 2018 college graduates with a bachelor's degree earned \$468 per week more than high school graduates. If this difference had instead been \$700 per week, then we would expect _____.
- More people to get into college.
 - Less people to get into college.
 - That nobody would change their behavior.
 - None of the above.

12. Shakira recently travelled to Colombia for vacation. Her total benefits from taking a vacation were \$1200, while her total cost were \$460. From this information it follows that her economic surplus from taking a vacation were _____.
- $\$1200 + \$460 = \$1660$
 - $\$1200 - \$460 = \$730$
 - $\$460 - \$1200 = -\$730$
 - Cannot be determined.
13. Andrea has \$75 to spend and wants to purchase either a new amplifier for her guitar or a new MP3 player. Each good costs exactly \$75, so she can only purchase one of the two items. This scenario illustrates the basic concept that _____.
- People face tradeoffs
 - Most consumers are irrational
 - Rational people never respond to incentives
 - Economic insights are never useful for analyzing consumption decisions.
14. The introduction of seatbelts and other safety measures in cars in the 60ties _____.
- Decreased accident death rates.
 - Provided an incentive for reckless driving.
 - Made car purchases more expensive.
 - None of the above.
15. Now assume that instead of additional safety measures, every car would have been required to have an irremovable, sharp, foot long, iron spike mounted into the steering wheel, aimed right at the driver's heart. Such a measure would have _____.
- Decreased accident death rates.
 - Provided an incentive for reckless driving.
 - Made car purchases more expensive.
 - None of the above.
16. The Incentive Principle states that_____.
- Scarcity is a universal phenomenon that arises because resources are limited.
 - An action should be taken if the additional benefits exceed the additional cost.
 - If the marginal benefit of an activity increases, then a rational person will engage in more of the activity.
 - Having more of one thing usually means getting by with less of something else.

Questions 18 to 24 refer to the following scenario:

It is a very hot day outside and you really like ice cream. Conduct a cost-benefit analysis for eating 0, 1, 2, ... scoops of ice cream.

| scoops | total benefit | total cost | marginal benefit | marginal cost | marginal surplus | total economic surplus |
|--------|---------------|------------|------------------|---------------|------------------|------------------------|
| 0 | 0 | 0 | | | | |
| 1 | 10 | 2 | | | | |
| 2 | 18 | 4 | | | | |
| 3 | 24 | 6 | | | | |
| 4 | 28 | 8 | | | | |
| 5 | 30 | 10 | | | | |
| 6 | 30 | 12 | | | | |
| 7 | 30 | 14 | | | | |
| 8 | 30 | 16 | | | | |
| 9 | 30 | 18 | | | | |
| 10 | 30 | 20 | | | | |

17. After eating _____ scoops of ice cream marginal benefit is highest.
- 0
 - 1
 - 2
 - 3
18. The additional benefit from consuming one more scoop of ice cream _____.
- Decreases
 - Is always the same
 - Increases
 - No pattern can be identified.
19. Which of the following is a unique feature of marginal benefit?
- Increasing output
 - Decreasing input
 - Increasing returns
 - Diminishing returns
20. After eating _____ scoops of ice cream marginal benefit is still equal to or greater than marginal cost.
- 9
 - 8
 - 6
 - 5
21. You would decline the _____ scoop of ice cream.
- 9th
 - 8th
 - 6th
 - 5th
22. Your total economic surplus is maximized at a value of _____.
- 8
 - 14
 - 18
 - 20
23. How many scoops of ice cream will you eat to maximize your total economics surplus?
- 9
 - 8
 - 6
 - 5