

Chapter 2 Tools of Positive Analysis

Multiple Choice

1. Positive economics

- A) does not depend on market interactions.
- B) only looks at the best parts of the economy.
- C) examines how the economy actually works (as opposed to how it should work).
- D) is very subjective.

Ans: c

2. The Law of Demand states

- A) that there is an inverse relationship between price and quantity demanded.
- B) that the judicial branch of government sets demand schedules.
- C) that laws can have no effect on market economies.
- D) none of the above.

Ans: a

3. The function $Y = f(X, Z)$ means

- A) X multiplied by Y equals f.
- B) $X + Y = Z$.
- C) Y is a function of both X and Z.
- D) none of the above.

Ans: c

4. If there is a function and one component is Y^3 , then there is a ____ in the function.

- A) square root
- B) cubic
- C) cosine
- D) circle

Ans: b

5. Refer to Question 4 above. The equation containing Y^3 would be

- A) linear.
- B) quadratic.
- C) a Nash equilibrium.
- D) inefficient.
- E) nonlinear.

Ans: e

6. Marginal and average taxes are
- A) calculated using the same methodology.
 - B) not used in modern tax analysis.
 - C) not calculated using the same methodology.
 - D) all of the above.

Ans: d

7. The slope of a regression line is calculated by dividing
- A) the intercept by the change in horizontal distance.
 - B) the change in horizontal distance by the change in vertical distance.
 - C) the change in horizontal distance by the intercept term.
 - D) the change in vertical distance by the change in horizontal distance.
 - E) none of the above.

Ans: d

8. Unobserved influences on a regression are captured in the
- A) error term.
 - B) parameters.
 - C) regression line.
 - D) regression coefficient.

Ans: a

9. The following can be analyzed using econometrics:
- A) labor supply.
 - B) market demand.
 - C) tax-setting behavior.
 - D) poverty.
 - E) all of the above.

Ans: e

10. Normative economics
- A) does not depend on market interactions.
 - B) only looks at the best parts of the economy.
 - C) examines how the economy actually works (as opposed to how it should work).
 - D) embodies value judgments.

Ans: d

11. The Latin phrase *ceteris paribus* means
- A) let the buyer beware.
 - B) other things being the same.
 - C) swim at your own risk.
 - D) whatever will be will be.

Ans: b

12. The substitution effect

- A) is when individuals consume more of one good and less of another.
- B) is associated with changes in relative prices.
- C) will have no effect if goods are unrelated.
- D) is all of the above.

Ans: d

13. Self-selection bias affects empirical estimation by

- A) leading to samples that are not representative of the entire population.
- B) making estimators improved.
- C) increasing the accuracy of test results.
- D) doing none of the above.

Ans: a

14. When different bundles of commodities give the same level of satisfaction, you are

- A) said to be indifferent between the bundles.
- B) said to be confused.
- C) not able to make a decision.
- D) unhappy with any combination.
- E) none of the above.

Ans: a

15. The marginal rate of substitution is

- A) the slope of the utility curve.
- B) the slope of the contract curve.
- C) the slope of the utility possibilities curve.
- D) none of the above.

Ans: a

16. Panel data requires

- A) data on individual entities.
- B) time.
- C) neither a nor b.
- D) both a and b.

Ans: d

17. A counterfactual is

- A) what happens when there are no facts.
- B) what would have happened if the treatment group had not received the treatment.
- C) a legal term describing the process of proving that a negative is the actual truth.
- D) none of the above.

Ans: b

True/False

18. Empirical analysis generally deals with theory and little data.

- A) True
- B) False
- C) Uncertain

Ans: b

19. Economists attempt, with moderate success, to perform controlled experiments making policy analysis helpful.

- A) True
- B) False
- C) Uncertain

Ans: a

20. Regression coefficients are indicators of the impact of independent variables on dependent variables.

- A) True
- B) False
- C) Uncertain

Ans: a

21. Primary data sources include information gathered from interviews and experiments.

- A) True
- B) False
- C) Uncertain

Ans: a

22. Multiple regression analysis typically requires several computers.

- A) True
- B) False
- C) Uncertain

Ans: c

23. Econometrics is the statistical analysis of economic data.

- A) True
- B) False
- C) Uncertain

Ans: a

24. Instrumental variables requires that the variable not be correlated with the outcome variable

- A) True
- B) False
- C) Uncertain

Ans: a

25. The demand for a good is not affected by the demand for a related good.

- A) True
- B) False
- C) Uncertain

Ans: c

26. Equilibrium in the market is where supply is equal to demand.

- A) True
- B) False
- C) Uncertain

Ans: a

27. A model is a simplified description of some aspect of the economy.

- A) True
- B) False
- C) Uncertain

Ans: a

28. Causation and Correlation are generally the same thing.

- A) True
- B) False
- C) Uncertain

Ans: b

29. An experimental study is one which individuals are randomly assigned to the treatment and control groups.

- A) True
- B) False
- C) Uncertain

Ans: a

Essay

30. Suppose that a competitive firm's marginal cost of producing output q is given by $MC=2+2q$. Assume that the market price of the firm's product is \$13.

- A) What level of output will the firm produce?
- B) What is the firm's producer surplus?

Ans: $q = 11/2$. Producer surplus $= \frac{1}{2}(11/2)11 = 121/4$.

31. Use the following function for elasticity: $\varepsilon = -(1/s)(P/X)$, where s is the slope of the demand curve, P is the price, and X is the quantity demanded, to find elasticity when demand is $X_d= 20-(1/5)P$ when the price of good X is 30.

Ans: $\varepsilon = -(1/-5)(30/24) = 1/4$

32. Imagine that the demand for concert tickets can be characterized by the equation $X_d = 14 - P/3$. The supply of tickets can be written as $X_s = P/4$. Find the equilibrium price and quantity of concert tickets.

Ans: $X^* = 6$, $P^* = 24$

33. “Since the social sciences are not like the natural sciences, experiments are a waste of time.”

Comment on the above statement.

Ans: It is true that social sciences are not the same as natural sciences. Experiments have been used successfully to tell us more about the world we live in. There are limits that social scientists should be aware of, but to dismiss the use of experimental analysis entirely would be incorrect.

34. Discuss the concept in econometrics that states, “garbage in . . . garbage out.”

Ans: When the data used in an econometric analysis are not carefully screened for errors, there can be faulty and misleading results that occur. There has been some time expended to ensure that the data have been “cleaned” properly.

35. It is possible that two different economists can examine the same situation, such as school funding, and reach entirely different conclusions. Why is this so?

Ans: Reasoning resulting in differing results includes the time period under examination, the data sources and proxies used, the econometric tools employed, and many other reasons. This is not to say that because different researchers come to different conclusions the analysis is confused. It just means further investigation is needed.

36. It has been suggested in the text that raising taxes on beer will reduce teen fatalities. Comment on this.

Ans: As the text suggests, this is perfect use of experimental data for testing. Using certain states as “controls” would allow us to examine the difference in fatalities between those states that did not change the tax. Of course, we need to control for other differences that might affect outcomes.

37. Why might the consequences of imposing a tax on harmful fast foods not adhere to theory?

Ans: Preferences of people with different desires could be altered in unintended ways. All variables could not be controlled for.