1. A *constant* is best defined as . . .
*A. A characteristic that assumes only one value in a sample
B. A characteristic whose values vary over categories
C. A multiple-regression technique used to determine causality
D. A binomial characteristic whose value alters with respect to specific categorization
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Introduction: Types of Variables and Levels of Measurement

2. Which of the following is defined as a characteristic that takes on multiple values in a sample or population?
A. A constant
*B. A variable
C. A distribution
D. A skew
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Introduction: Types of Variables and Levels of Measurement

3. A professor is undertaking a longitudinal research project into the criminal behavior of Irish women residing in Chicago. In this example *Irish Women* would be an example of which of the following?
A. Accio analytic unit
B. Standard deviation unit
C. A constant variable
*D. Unit of analysis
@ Question type: MC
Cognitive Domain: Comprehension, Application
Answer Location: Units of Analysis

4. A factor that is used to try to explain or predict a dependent variable is referred to as what in statistics and research?
A. An empirical variable
B. A skewed variable
*C. An independent variable
D. An effectual variable
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Independent and Dependent Variables

5. Which level of measurement is the most basic and least descriptive?
A. Ordinal
B. Ratio
C. Interval
*D. Nominal
@ Question type: MC

Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

6. Which of the following lists the levels of measurement in statistics?
A. Categorical and ordinal
B. Categorical, ordinal, and quantitative
*C. Nominal, ordinal, interval, and ratio
D. Nominal, categorical, frequency, and empirical
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

7. A ruler could be described as which type of level of measurement?
*A. Interval
B. Categorical
C. Nominal
D. Ratio
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

8. A researcher has collected data for her most recent study into criminal incidents in rural areas. She has one variable that has a ranked characteristic. This variable would be described as belonging to what level of measurement?
*A. Ordinal
B. Binomial
C. Nominal
D. Ratio
@ Question type: MC
Cognitive Domain: Comprehension, Application
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables

9. For a study into rural crime, a researcher has a good amount of descriptive data. One variable is a basic demographic data point indicating a subject's racial/ethnic origin. This variable is composed of classifications indicating *Hispanic*, *Caucasian*, *Pacific Islander*, and *African-American*. What type of data is this variable?
A. Ratio
*B. Categorical
C. Continuous
D. Binomial
@ Question type: MC
Cognitive Domain: Comprehension, Application
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables

10. What study is conducted by the Bureau of Justice statistics as a supplement to the National Crime Victimization Survey in which respondents are asked questions regarding recent experiences with police?
*A. The Police-Public Contact Survey
B. The National Law Enforcement Quality Survey
C. The General Social Survey
D. The National Police Survey
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Data Sources 2.1: The Police-Public Contact Survey

11. What is the Department of Justice's data repository?
A. The Inter-University Consortium for Political and Social Research (ICPSR)
B. The Office of Juvenile Justice and Delinquency Programs (OJJDP)
C. The Library of Congress
*D. The Bureau of Justice Statistics (BJS)
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Data Sources 2.3: The Bureau of Justice Statistics (BJS)

12. The only level of data that contains a TRUE zero is _____.
A. interval
B. nominal
*C. ratio
D. categorical
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

13. The level of measurement that is numeric, rank-orderable, and has equal intervals between adjacent points but that does not have a true zero is_____.
A. nominal
B. ratio
*C. interval
D. ordinal
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

14. Which of the following words describes a phenomenon that is measured, observed, or tangible?
*A. Empirical
B. Independent
C. Dependent
D. Didactic
@ Question type: MC

Cognitive Domain: Comprehension
Answer Location: Independent and Dependent Variables

15. A researcher has started analyzing data in a project investigating urban crime. Unbeknownst to him, he has inadvertently omitted one very important variable that would have explained the dependent variable very well. What error has been committed in this study?
A. Eliminated variable dilemma
B. Ecological fallacy
C. There has been no error as the researcher will simply manipulate the data and arrive at meaningful results
*D. Omitted variable bias
@ Question type: MC
Cognitive Domain: Comprehension, Application
Answer Location: Relationships between Variables: A Cautionary Note

16. The results of a study on police use of conducted energy devices (CED. indicated that police were more to likely to use CEDs for what race of suspects?
A. Blacks
B. Whites
*C. Hispanics
D. There was no difference in suspects' race for CED deployment
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Research Example 2.1: Choosing Variables for a Study on Police Use of Conductive Energy Devices

17. Categorical variables are generally divided into two distinct types. What are the two types?
A. Categorical and discrete
*B. Nominal and ordinal
C. Nominal and categorical
D. Interval and ratio
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

18. Continuous variables are generally divided into two types. What are the two types?
*A. Categorical and discrete
B. Nominal and ordinal
C. Nominal and categorical
D. Interval and ratio
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

19. The General Social Survey (GSS) is one of the most important sociological questionnaires proctored. The GSS is conducted by which organization?

A. The RAND Corporation
B. The Virgin Corporation
C. The ICPSR
*D. The National Opinion Research Center (NORC)
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Data Sources 2.2: The GSS

20. Which large-scale survey is available only in the English language?
A. The General Social Survey (GSS)
*B. The Police-Public Contact Survey (PPCS)
C. The Minnesota Multiphasic Police Interview (MMPI)
D. The National Police Survey (NPS)
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Data Sources 2.1: The Police-Public Contact Survey

21. The difference between the ratio level and interval level of measurement is which of the following?
*A. Ratio-level scales have meaningful zero points that represent the absence of a given characteristic, but interval-level scales do not
B. Ratio-level scales are quantitative while interval-level scales are qualitative
C. The ratio-level has equal and know distances between adjacent points while interval level does not
D. Interval-level scales have a true zero point, but ratio-level scales do not
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

22. What were the units of analysis for the Hart and Meithe (2009) study on self-defensive gun use?
A. Guns
B. Victims
*C. Criminal incidents
D. Self-defense
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Research Example 2.2: Units of Analysis

23. What were the units of analysis for the Kleck and Kovandzic (2009) study on the choice to keep a firearm in the home and local levels of crime and police strength?
*A. Individuals and cities
B. Firearms and local levels of crime
C. Police strength and firearms
D. Homes and local levels of crime
@ Question type: MC

Cognitive Domain: Comprehension
Answer Location: Research Example 2.2: Units of Analysis

24. What two variables are often used interchangeably in the "real world" of statistical analysis?
A. Ratio and interval
B. Ordinal and interval
C. Categorical and ordinal
*D. Interval and ratio
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

25. Which kind of variable is a quantitative measurement of the presence or absence of a certain characteristic in a group of people or objects?
A. Nominal variable
*B. Continuous variable
C. Categorical variable
D. Ordinal variable
@ Question type: MC
Cognitive Domain: Comprehension
Answer Location: Chapter Summary

26. A unit of analysis is defined as the target or object under study.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Units of Analysis

27. The empirical event a researcher is trying to explain is known as the independent variable in a research study.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Independent and Dependent Variables
Feedback: An empirical event that a researcher seeks to explain is a dependent variable.

28. In research methods the terms *independent variable* and *dependent variable* are synonymous with *cause* and *effect*.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note

Feedback: Independent and dependent variables should be viewed in terms of relationships or associations, not as one variable that definitively causes the other.

29. The exclusion of one or more important variables in a research study is referred to as *omitted variable bias*.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note

30. A characteristic that takes on multiple values in a sample or population is defined as a variable.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Introduction: Types of Variables and Levels of Measurement

31. Statistical analyses are scientific examinations of aggregate trends.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note

32. An independent variable is better understood as an outcome rather than an effect.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note
Feedback: A dependent variable is an outcome. An independent variable would be the predictor that is used to try to explain the dependent variable.

33. It is vital in statistics to acknowledge the fact that all statistical relationships and associations are causal in nature.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note
Feedback: It is incorrect to interpret statistical relationships as proof that one variable causes another.

34. Categorical data are measured using numbers that have equal intervals between adjacent points on a scale.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement
Feedback: This description applies to continuous data, not categorical data.

35. If the variable *monthly income* were to be measured as *number of dollars earned in one month*, then this variable would be ratio level.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

36. Ordinal variables are important and useful in research because high powered statistical analyses and algebraic functions can readily be applied to them.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables
Feedback: Ordinal variables actually limit the number and sophistication of statistical analyses that can be conducted.

37. The General Social Survey (GSS) has been conducted annually or every 2 years since 1972.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables

38. The Bureau of Justice Statistics (BJS) gathers national data on a variety of criminal justice agencies, institutions, and issues.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

39. Continuous variables can be added, subtracted, multiplied, and divided, whereas categorical variables cannot.
*a. True
b. False

@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

40. When selecting which type of data to use it is wise to select the lowest level possible as that would be the easiest to manipulate numerically.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension, Application
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables
Feedback: Variables should always be measured at the highest level of measurement possible.

41. Continuous variables can be made into categorical variables.
*a. True
b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

42. Categorical variables can be made into continuous variables.
a. True
*b. False
@ Question type: TF
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables
Feedback: Only the reverse (continuous into categorical) is possible.

Type: F
43. An _____ is an independent variable that is significantly related to a dependent variable but has erroneously been excluded from a statistical analysis.
*a. omitted variable
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: Relationships between Variables: A Cautionary Note

Type: F
44. A variable such as *race* would be considered a _____ level of measurement by a researcher.
*a. nominal
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables

Type: F
45. The Police-Public Contact Survey is conducted by the _____.

*a. Bureau of Justice Statistics
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: Data Sources 2.1: The Police-Public Contact Survey

Type: F
46. The highest level of measurement is the _____ level.
*a. ratio
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: F
47. The Centigrade and Fahrenheit temperature scales would be considered _____ levels of measurement
*a. interval
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: F
48. The level of measurement of the variable *gender* is _____.
*a. nominal
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Categorical Level of Measurement: Nominal and Ordinal Variables

Type: F
49. The level of measurement of the variable *number of times arrested* is _____.
*a. ratio
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: F
50. It is possible for a researcher to take continuous data and generate _____ data from it by creating categories.
*a. categorical
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: F
51. A _____ is a variable that takes on only one value in a sample or population and is often used by researchers examining multiple variables to determine more nuanced statistical associations.

*a. constant
Question type: FIB
Cognitive Domain: Comprehension, Application
Answer Location: Introduction: Types of Variables and Levels of Measurement

Type: F
52. The _____ is essentially the object of target of a research project.
*a. unit of analysis
Question type: FIB
Cognitive Domain: Comprehension
Answer Location: Units of Analysis

Type: E
53. Describe the different levels of measurement.
*a. Answer: Nominal measures simply divide entities into discrete categories. Ordinal measures have the added characteristics of rank ordering. Interval measures are divided into discrete categories, have rank ordering, and have equal intervals between their ranks. Ratio levels of measurement are divided into discrete categories, have rank ordering, equal intervals between the ranks, and include a true, meaningful zero point.
Question type: ESS
Cognitive Domain: Comprehension
Answer Location: Levels of Measurement

Type: E
54. Why is it important to correctly identify a particular variable's level of measurement before proceeding with any type of statistical analysis?
*a. Answer: Level of measurement determines the types of statistical analyses that can be employed. A variable's level of measurement must, therefore, be correctly identified at the outset so that the proper analytic techniques can be selected.
Question type: ESS
Cognitive Domain: Comprehension
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: E
55. Define the term *unit of analysis*. In criminal justice and criminology research, what is often the unit of analysis?
*a. Answer: The unit of analysis is the object or target of a research study. In criminal justice and criminology research, individual people are often the units of analysis.
Question type: ESS
Cognitive Domain: Comprehension, Application
Answer Location: Units of Analysis

Type: E
56. Explain why it is possible to generate categorical variables from continuous data but not possible to obtain continuous data from categorical variables.

*a. Answer: It is possible to have a data set containing continuous data and simply categorize variables into discrete blocks of information. This same process cannot be performed with categorical variables. For example, suppose a researcher has a data set containing a variable identified as *income*. This variable is simply income on a per dollar basis, with no specific categories. A researcher can easily take the continuous variable and create smaller blocks or categories of income. The income data could be broken up into categories such as $0-$5000, $5001-$10,000, $10,001-$15,000, and so on and so forth.
This process is not possible with categorical data. If a researcher began with the income variable already divided up into blocks or discrete categories there is no method by which to determine exactly what any specific individual's income on a per-dollar basis would be in any given year.
Question type: ESS
Cognitive Domain: Comprehension, Application
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables

Type: E
57. Briefly explain why it is easier to scientifically and mathematically analyze continuous data and not so easy a task to examine categorical data.
*a. Answer: Continuous data are empirical observations that can be manipulated via algebraic equations such as used within statistics. Any continuous variable can be readily added, subtracted, multiplied, and divided. Higher end mathematical and statistical operations can be performed with relative ease using continuous data. For example, the variable of *income* can be added to other individual's annual income to give an impression of an economic base of a certain geographic region. This variable could also be subtracted, multiplied, or even divided by various techniques to arrive at very real and meaningful outcomes for a researcher. On the other hand, categorical variables cannot easily be manipulated mathematically. For example, a variable of gender, defined as *male* and *female* categories cannot readily be manipulated via statistics. It's not possible to add one male to two females and then divide by 3 females and arrive at any meaningful or proper answer.
Question type: ESS
Cognitive Domain: Comprehension, Application
Answer Location: The Continuous Level of Measurement: Interval and Ratio Variables