Chapter 1 Concepts, Variables, and MeasurementMultiple Choice:1. Anomie is an example of a \_\_\_\_\_\_\_\_\_\_.
a. statistic
b. sociological concept
c. level of measurement
d. unit of analysis
Answer: BPage ref: 9-102. A(n) \_\_\_\_\_\_\_\_\_ is defined as anything that may vary from one case to the next.
a. variable
b. concept
c. anomaly
d. level of measurement
Answer: APage ref: 113. A logical set of characteristics for a variable is referred to as:
a. concepts
b. variables
c. attributes
d. units of analysis
Answer: CPage ref: 114. Suppose a researcher hypothesizes that an increase in education leads to increased
income. What is the independent variable?
a. years of education
b. income
c. both a and b
d. none of the above
Answer: APage ref: 12-135. Identify the dependent variable in the following hypothesis: If age increases then
income increases.
a. age
b. income
c. both a and b
d. none of the above
Answer: BPage ref: 12-13Copyright © 2012 Pearson Education, Inc. All rights reserved.
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6. Which of the following criteria must be met in order to effectively argue that two
variables are associated?
a. The cause must precede the effect.
b. Changes are not caused by some preceding or intervening variable.
c. The association must be present “often enough.”
d. All of the above.
Answer: DPage ref: 137. The process of defining what we mean by a concept is called \_\_\_\_\_\_\_\_\_\_.
a. conceptualization
b. operationalization
c. alienation
d. variability
Answer: APage ref: 13-148. The process of developing a variable that measures a concept is called \_\_\_\_\_\_\_\_\_\_.
a. conceptualization
b. operationalization
c. alienation
d. variability
Answer: BPage ref: 13-149. Properly operationalized variables must have attributes that are \_\_\_\_\_\_\_\_\_\_.
a. mutually exclusive
b. collectively exhaustive
c. independent
d. both a and b
Answer: DPage ref: 1410. When the attributes of a variable include every possible response the attributes are
said to be \_\_\_\_\_\_\_\_\_\_.
a. mutually exclusive
b. conceptualized
c. collectively exhaustive
d. dependent
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11. Attributes are \_\_\_\_\_\_\_\_\_\_\_ when the categories do not overlap.
a. mutually exclusive
b. conceptualized
c. collectively exhaustive
d. dependent
Answer: APage ref: 1612. Race is measured at the \_\_\_\_\_\_\_\_\_ level of measurement.
a. nominal
b. ordinal
c. interval/ratio
d. organizational
Answer: APage ref: 17-1913. Age at first marriage is measured at the \_\_\_\_\_\_\_\_\_ level of measurement.
a. nominal
b. ordinal
c. interval/ratio
d. organizational
Answer: CPage ref: 17-1914. The categories used in the 2006 General Social Survey for the variable Class include
the following: lower, working, middle, and upper class. Identify the level of
measurement for this variable.
a. nominal
b. ordinal
c. interval
d. ratio
Answer: BPage ref: 17-1915. Which of the following is a nominal variable?
a. years of education
b. political party affiliation
c. highest degree earned
d. age
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16. Pie charts are common ways of presenting data for:
a. nominal variables
b. ordinal variables
c. interval/ratio variables
d. both a and b
Answer: DPage ref: 2117. Bar charts are common ways of presenting data for:
a. nominal variables
b. ordinal variables
c. interval/ratio variables
d. both a and b
Answer: DPage ref: 2218. Which type of chart is used to represent interval/ratio data?
a. pie charts
b. bar charts
c. histograms
d. both a and b
Answer: CPage ref: 2219. Which of the following is most appropriate to present data on years of education?
a. pie charts
b. bar charts
c. histograms
d. both a and b
Answer: CPage ref: 2220. \_\_\_\_\_\_\_\_\_\_ refers to the degree to which a variable measures what we think it is
measuring.
a. Validity
b. Reliability
c. Conceptualization
d. Operationalization
Answer: APage ref: 22-23Copyright © 2012 Pearson Education, Inc. All rights reserved.
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21. \_\_\_\_\_\_\_\_\_\_ refers to the degree to which a measure yields consistent results.
a. Validity
b. Reliability
c. Conceptualization
d. Operationalization
Answer: BPage ref: 22-2322. The General Social Survey is an example of \_\_\_\_\_\_\_\_\_ data.
a. ecological
b. organizational
c. individual
d. group
Answer: CPage ref: 2523. The U.S. Census is an example of \_\_\_\_\_\_\_\_\_ data.
a. ecological
b. organizational
c. individual
d. group
Answer: APage ref: 27True/False:24. Happiness is the independent variable in the following statement: If income increases
then happiness increases.
Answer: FalsePage ref: 12-1325. Conceptualization is the process of defining what we mean by a concept.
Answer: TruePage ref: 13-1426. Attributes are collectively exhaustive when the attributes do not overlap.
Answer: FalsePage ref: 1627. Ordinal variables have attributes based on relative numeric values.
Answer: FalsePage ref: 18Copyright © 2012 Pearson Education, Inc. All rights reserved.
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28. Interval/ratio is considered the highest level of measurement.
Answer: TruePage ref: 18-1929. Pie charts should be used to present data for nominal or ordinal variables.
Answer: TruePage ref: 2130. Histograms are used to display data for nominal variables.
Answer: FalsePage ref: 2231. Survey questions are not reliable if respondents interpret the questions in different
ways.
Answer: TruePage ref: 23, 30Short Answer:32. What are statistics, and why are they important?
Answer: Statistics are numeric representations of reality that facilitate our ability todescribe, communicate, predict, and act. Statistics are important for a number ofreasons. Namely, statistics provides a range of analytical tools that we have to approachand live in the world with which we are confronted. Statistics help us to think criticallyand reflectively about what others tell us about the world so that we can come to ourown, well-informed, conclusions.Page ref: 10-11Copyright © 2012 Pearson Education, Inc. All rights reserved.
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33. The following is an empirical research question: Does a person’s sexual orientationhave an effect on annual income? Consider this research question and answer the
following:
a. State a suitable research hypothesis:
b. What is the independent variable?
c. What is the level of measurement for the independent variable?
d. What is the dependent variable?
e. What is the level of measurement for the dependent variable?
f. What is the unit of analysis for the research question?
Answer:a. Example: Homosexuals have higher incomes than heterosexuals.b. Sexual orientationc. Nominald. Incomee. Interval/ratiof. IndividualPage ref: 11-13, 17-1934. Identify the independent and the dependent variable, as well as the unit of analysis, in
the following hypothesis: Urban residents are more likely than rural residents to beoverweight.Dependent variable:
Independent variable:
Unit of analysis:
Answer:Dependent variable: WeightIndependent variable: Place of residenceUnit of analysis: IndividualPage ref: 11-1335. Suppose a researcher finds an association between age and home ownership. Three
conditions must be satisfied in order to argue a causal connection. Name and discuss
two of these three conditions.
Answer: The three (two asked) conditions are: The cause must precede the effect,changes are not caused by some preceding or intervening variable, and the associationmust be present “often enough.”Page ref: 1336. Discuss two factors that must be considered when operationalizing a variable.
Answer: Variables must be collectively exhaustive—attributes include every possibleresponse—and mutually exclusive—each case can be applied to only one attribute of avariable.Page ref: 14Copyright © 2012 Pearson Education, Inc. All rights reserved.
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37. Distinguish between the individualistic and ecological fallacy.
Answer: The individualistic fallacy is a type of error that occurs when the characteristicsof an individual are imposed upon all of the members of a group to which that individualbelongs, whereas the ecological fallacy results from drawing conclusions aboutindividuals based on characteristics of a group.Page ref: 29