Chapter 1: Introduction to Statistics

Test Bank

# Multiple Choice

1. Generally, what is the first step in the research process?

a. develop a research hypothesis to be tested

b. collect data

c. analyze data

d. communicating the findings of the study

Ans: A

Cognitive Domain: Knowledge

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Easy

2. Which of the following steps in the research process involves calculating statistics?

a. develop a research hypothesis to be tested

b. collect data

c. analyze data

d. draw a conclusion regarding the research hypothesis

Ans: C

Cognitive Domain: Knowledge

Answer Location: Introduction to the Stages of the Research Process

Difficulty Level: Easy

3. The final step in the research hypothesis involves \_\_\_\_\_\_.

a. developing a research hypothesis to be tested

b. collecting data

c. analyzing data

d. communicating the findings of the study

Ans: D

Cognitive Domain: Knowledge

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Easy

4. The \_\_\_\_\_\_ uses objective and systematic collection and analysis of empirical data to test theories and hypotheses.

a. scientific method

b. theory construction

c. hypothesis formation

d. statistics

Ans: A

Cognitive Domain: Knowledge

Answer Location: Introduction to the Stages of the Research Process

Difficulty Level: Easy

5. Which of the following is NOT one of the main steps or phases in the scientific method of inquiry?

a. collecting data

b. developing a null hypothesis

c. drawing conclusions regarding the research hypothesis

d. communicating the findings of the study

Ans: B

Cognitive Domain: Knowledge

Answer Location: Introduction to the Stages of the Research Process

Difficulty Level: Easy

6. When a researcher has determined that the data will come from responses to a survey, which step in the research process would this fall under?

a. collecting data

b. analyzing data

c. drawing conclusions regarding the research hypothesis

d. communicating the findings of the study

Ans: A

Cognitive Domain: Knowledge

Answer Location: Introduction to the Stages of the Research Process

Difficulty Level: Medium

7. Which step in the research process involves identifying the question or issue of interest?

a. develop a research hypothesis to be tested

b. collect data

c. analyze data

d. communicate the findings of the study

Ans: A

Cognitive Domain: Knowledge

Answer Location: Introduction to the Stages of the Research Process

Difficulty Level: Easy

8. Drawing a sample from a population, determining how the variables will be measured, and selecting a method by which to collect the data are all part of which step in the research process?

a. develop a research hypothesis to be tested

b. collect data

c. analyze data

d. draw a conclusion regarding the research hypothesis

Ans: B

Cognitive Domain: Knowledge

Answer Location: Collecting Data

Difficulty Level: Easy

9. A research hypothesis may be defined as a statement \_\_\_\_\_\_.

a. regarding a spurious relationship between variables

b. regarding a general question of interest

c. regarding an expected relationship between variables

d. developed at the end of a research study

Ans: C

Cognitive Domain: Knowledge

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Easy

10. A research hypothesis may best be thought of as \_\_\_\_\_\_.

a. proof

b. a prediction

c. an idea

d. a decision

Ans: B

Cognitive Domain: Comprehension

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Medium

11. A research hypothesis is best thought of as \_\_\_\_\_\_.

a. directional

b. an expected relationship between samples and populations

c. bimodal

d. developed at the end of a research study

Ans: A

Cognitive Domain: Knowledge

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Medium

12. A research hypothesis is a \_\_\_\_\_\_ regarding the relationship between variables.

a. statistic

b. decision

c. question

d. statement

Ans: D

Cognitive Domain: Knowledge

Answer Location: Developing a Research Hypothesis to Be Tested

Difficulty Level: Easy

13. The independent variable is the variable that is \_\_\_\_\_\_ by the researcher, while the dependent variable is the variable \_\_\_\_\_\_ by the researcher.

a. manipulated; caused

b. measured; controlled

c. measured; manipulated

d. manipulated; measured

Ans: D

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Medium

14. Within a research hypothesis, the independent variable may be thought of as the \_\_\_\_\_\_ and the dependent variable may be thought of as the \_\_\_\_\_\_.

a. effect; cause

b. prediction; conclusion

c. cause; effect

d. question; answer

Ans: C

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Easy

15. The dependent variable may be thought of as the \_\_\_\_\_\_; the independent variable is the \_\_\_\_\_\_.

a. cause; outcome

b. goal; the way of achieving the goal

c. effect; cause

d. beginning; end

Ans: C

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Easy

16. Within a research hypothesis, the \_\_\_\_\_\_ variable may be thought of as the \_\_\_\_\_\_.

a. independent; cause

b. independent; outcome

c. dependent; cause

d. dependent; beginning

Ans: A

Cognitive Domain: Knowledge

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Medium

17. Within a research hypothesis, the \_\_\_\_\_\_ variable may be thought of as the \_\_\_\_\_\_.

a. independent; outcome

b. independent; result

c. dependent; effect

d. dependent; cause

Ans: C

Cognitive Domain: Knowledge

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Medium

18. “Americans are more likely to be obese.” What is the main problem with how this research hypothesis has been stated?

a. It does not fully define the independent variable.

b. It does not fully define the dependent variable.

c. It does not indicate the direction of the relationship between variables.

d. It has been stated using words rather than numbers.

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Hard

19. “Group A will have the lowest scores on the test.” What is the main problem with how this research hypothesis is stated?

a. It does not fully identify the dependent variable.

b. It does not fully identify the independent variable.

c. It does not indicate the direction of the relationship between variables.

d. It has been stated using words rather than numbers.

Ans: B

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Hard

20. “Women are much better than men.” What is the main problem with how this research hypothesis is stated?

a. It does not fully identify the dependent variable.

b. It does not fully identify the independent variable.

c. It does not indicate the direction of the relationship.

d. It has been stated using words rather than numbers.

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Hard

21. “The voting patterns of Californians are different than New Yorkers.” What is the main problem with how this research hypothesis has been stated?

a. It does not identify the independent variable.

b. It does not identify the dependent variable.

c. It does not indicate the direction of the relationship between variables.

d. It has been stated using words rather than numbers.

Ans: C

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

22. “Attitudes toward global warming vary as a function of political party.” What is the main problem with how this research hypothesis has been stated?

a. It addresses a sensitive political issue.

b. It does not indicate the direction of the relationship between variables.

c. It does not identify the dependent variable included in the study.

d. It does not fully identify the independent variable included in the study.

Ans: B

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

23. “I hypothesize there is no relationship between vaccinations and autism”. What is the main problem with how this research hypothesis is stated?

a. It is not directional.

b. It does not say which type of statistic should be calculated.

c. It does not identify the variables.

d. It requires expertise in both medicine and psychology.

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

24. Which of the following is an example of a directional hypothesis?

a. Women are more likely to experience higher levels of fear of crime.

b. Women are more likely to experience different levels of fear of crime.

c. Men are more likely to experience different levels of fear of crime.

d. Men and women will have equal levels of fear of crime.

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

25. Of the following hypotheses presented, which one is non-directional?

a. Older individuals have a lower perception of safety at night.

b. Women have a lower perception of safety at night.

c. Men have a higher perception of safety at night.

d. Younger and older individuals will differ on their perception of safety at night.

Ans: D

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

26. A researcher hypothesizes that students who work part-time have higher college GPAs than students with full-time jobs. In this study, the independent variable is \_\_\_\_\_\_; the dependent variable is \_\_\_\_\_\_.

a. college GPA; employment status

b. employment status; students

c. employment status; college GPA

d. students; college GPA

Ans: C

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

27. At the beginning of a football game, a coin is flipped to decide which of the two teams will have possession of the ball first. A coach believes that winning the coin flip increases the likelihood of winning the game. In this situation, the independent variable is \_\_\_\_\_\_; the dependent variable is \_\_\_\_\_\_.

a. outcome of coin flip; outcome of game

b. winning the game; winning the coin flip

c. outcome of game; outcome of coin flip

d. team; outcome of game

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

28. A researcher hypothesizes that students who listen to classical music while studying will perform better on exams than students who study listening to rock. In this study, the independent variable is \_\_\_\_\_\_; the dependent variable is \_\_\_\_\_\_.

a. type of music; students

b. exam score; type of music

c. students; exam score

d. type of music; exam score

Ans: D

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

29. A recent medical study found that children who watch more than 4 hours of television a day were more likely to be obese (overweight) than children who watched less television. In this study, the independent variable is \_\_\_\_\_\_; the dependent variable is \_\_\_\_\_\_.

a. obesity; television viewing

b. children; television viewing

c. television viewing; obesity

d. children; obesity

Ans: C

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Medium

30. A researcher hypothesizes that businesses that adopt telecommuting policies (allowing workers to work at home rather than have to drive to work) have lower turnover than businesses that do not have these policies. In this study, the independent variable is \_\_\_\_\_\_.

a. businesses that adopt telecommuting policies

b. workers

c. lower turnover

d. turnover

e. telecommuting policies

Ans: A

Cognitive Domain: Application

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

31. A researcher hypothesizes that businesses that adopt telecommuting policies (allowing workers to work at home rather than have to drive to work) have lower turnover than businesses that do not have these policies. In this study, the dependent variable is \_\_\_\_\_\_.

a. businesses that adopt telecommuting policies

b. workers

c. lower turnover

d. turnover

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

32. A salesman for the telephone company Yellow Pages tells store owners that the bigger their advertisement, the more calls they will receive from potential customers. In this situation, the dependent variable is \_\_\_\_\_\_.

a. bigger advertisements

b. customers

c. number of calls

d. size of advertisement

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

33. A researcher hypothesizes students who work full-time are less likely to graduate than students working part-time. In this study, the independent variableis \_\_\_\_\_\_.

a. employment status

b. percentage

c. students

d. full-time employees

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

34. A researcher hypothesizes students who work full-time are less likely to graduate than students working part-time. In this study, the dependent variable is \_\_\_\_\_\_.

a. employment status

b. likelihood of graduation

c. students

d. full-time employees

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

35. A researcher studying proposed changes to Social Security hypothesizes that people aged 35-54 are less in favor of his changes than either younger or older respondents. In this study, the independent variable is \_\_\_\_\_\_.

a. Social Security

b. age

c. attitude toward proposed changes

d. proposed changes

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

36. Two researchers hypothesize that “parents who use more frequent verbal punishment ... will report more problem behaviors in their children” (Brenner & Fox, 1998, p. 252). In this study, the independent variable is \_\_\_\_\_\_.

a. parents

b. children

c. use of verbal punishment

d. number of problem behaviors reported

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

37. Two researchers hypothesize that “parents who use more frequent verbal punishment...will report more problem behaviors in their children” (Brenner & Fox, 1998, p. 252). In this study, the dependent variable is \_\_\_\_\_\_.

a. parents

b. children

c. use of verbal punishment

d. number of problem behaviors reported

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

38. A researcher hypothesizes that people aged 35–54 are more opposed to a governor’s special election than either younger (<35) or older (>54) voters. In this study, the independent variable is \_\_\_\_\_\_.

a. people aged 35–54

b. age

c. attitude about the special election

d. the governor

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

39. A researcher hypothesizes that people aged 35–54 are more opposed to a governor’s special election than either younger (<35) or older (>54) voters. In this study, the dependent variable is \_\_\_\_\_\_.

a. people aged 35–54

b. age

c. attitude about the special election

d. the governor

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

40. A research team hypothesizes that “children will rate a disciplining strategy emphasizing logic and reason as more effective than one based on rewards and punishment” (Barnett et al., 1996, p. 414). In this study, the independent variable is \_\_\_\_\_\_.

a. children

b. type of disciplining strategy

c. logic and reason

d. effectiveness of disciplining strategy

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

41. A research team hypothesizes that “children will rate a disciplining strategy emphasizing logic and reason as more effective than one based on rewards and punishment" (Barnett et al, 1996, p. 414). In this study, the dependent variable is \_\_\_\_\_\_.

a. children

b. type of disciplining strategy

c. logic and reason

d. effectiveness of disciplining strategy

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

42. A recent medical study found that children who watch more than 4 hours of television a day were more likely to be obese (overweight) than children who watched less television. In this study, the independent variable is \_\_\_\_\_\_.

a. obesity

b. 4 hours of television

c. time spent watching television

d. children watching television

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

43. A recent medical study found that children who watch more than 4 hours of television a day were more likely to be obese (overweight) than children who watched less television. In this study, the dependent variable is \_\_\_\_\_\_.

a. obesity

b. 4 hours of television

c. time spent watching television

d. children watching television

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

44. One study found that college students’ grades in Introductory Psychology (Psy 1) was a better predictor of their GPA within the Psychology major than their SAT scores (Meeker et al., 1994). In this study, the independent variable is \_\_\_\_\_\_.

a. Introductory Psychology

b. predictor of GPA within the Psychology major

c. GPA within the major

d. college students

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

45. One study found that college students’ grades in Introductory Psychology (Psy 1) was a better predictor of their GPA within the Psychology major than their SAT scores (Meeker et al, 1994). In this study, the dependent variable is \_\_\_\_\_\_.

a. Introductory Psychology

b. predictor of GPA within the Psychology major

c. GPA within the major

d. college students

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

46. Two researchers hypothesize “consumers would think that a ‘sale price’ presentation would generate a greater monetary savings than an ‘everyday low price’ presentation” (Tom & Ruiz, 1997). In this study, the independent variable is \_\_\_\_\_\_.

a. monetary savings

b. consumers

c. “sale price” presentation

d. type of presentation

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

47. Two researchers hypothesize “consumers would think that a ‘sale price’ presentation would generate a greater monetary savings than an 'everyday low price’ presentation” (Tom & Ruiz, 1997). In this study, the dependent variable is \_\_\_\_\_\_.

a. monetary savings

b. consumers

c. “sale price” presentation

d. type of presentation

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and Their Independent and Dependent Variables

Difficulty Level: Easy

48. A recent study of college women hypothesized that “females with higher levels of depressive symptoms will be more likely to engage in casual sex than females with fewer symptoms” (Grello et al, 2006). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. females

b. level of depressive symptoms

c. likeliness of engaging in casual sex

d. fewer symptoms

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

49. A recent study of college women hypothesized that “females with higher levels of depressive symptoms will be more likely to engage in casual sex than females with fewer symptoms” (Grello et al, 2006). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. females

b. level of depressive symptoms

c. likeliness of engaging in casual sex

d. fewer symptoms

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

50. In the journal *Cyber Psychology and Behavior*, a team of researchers hypothesize “Heavy users of online games have less fulfilling interpersonal relationships than individuals who spend very little or no time playing online games” (Lo et al, 2005). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. satisfaction with interpersonal relationships

b. heavy users of online games

c. less fulfilling interpersonal relationships

d. amount of time playing online games

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

51. In the journal *Cyber Psychology and Behavior*, a team of researchers hypothesize “Heavy users of online games have less fulfilling interpersonal relationships than individuals who spend very little or no time playing online games” (Lo et al, 2005). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. satisfaction with interpersonal relationships

b. heavy users of online games

c. less fulfilling interpersonal relationships

d. amount of time playing online games

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

52. In the journal *Cyber Psychology and Behavior*, a researcher asked, “Are students who report higher degrees of loneliness more likely to form new online relationships than other students with lower degrees of loneliness?” (Bonebrake, 2002). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. likelihood of forming online relationships

b. degree of loneliness

c. type of relationship

d. students

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

53. In the journal *Cyber Psychology and Behavior*, a researcher asked, “Are students who report higher degrees of loneliness more likely to form new online relationships than other students with lower degrees of loneliness?” (Bonebrake, 2002). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. likelihood of forming online relationships

b. degree of loneliness

c. type of relationship

d. students

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

54. A team of researchers “predicted that men who believe that a woman was attracted to them would act on their belief and behave relatively more flirtatiously toward the woman than would men having no such belief” (Ridge & Reber, 2002). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. men who believe that a woman was attracted to them

b. gender

c. belief regarding a woman’s attraction

d. amount of flirtatious behavior

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

55. A team of researchers “predicted that men who believe that a woman was attracted to them would act on their belief and behave relatively more flirtatiously toward the woman than would men having no such belief” (Ridge & Reber, 2002). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. men who believe that a woman was attracted to them

b. gender

c. belief regarding a woman’s attraction

d. amount of flirtatious behavior

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

56. “We hypothesized that parents who use more frequent verbal punishment...will report more problem behaviors in their children” (Brenner & Fox, 1998, p. 252).In this study, the independent variable is best described as \_\_\_\_\_\_.

a. problem behaviors reported

b. parents

c. children

d. use of verbal punishment

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

57. “We hypothesized that parents who use more frequent verbal punishment...will report more problem behaviors in their children” (Brenner & Fox, 1998, p. 252). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. problem behaviors reported

b. parents

c. children

d. use of verbal punishment

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

58. A researcher studying gambling behavior finds that people playing bingo will bet more money when they are allowed to choose their bingo cards than when they do not have this choice. In this study, the independent variable is best described as \_\_\_\_\_\_.

a. studying gambling behavior

b. amount of money bet

c. ability to choose cards

d. people playing bingo

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

59. A researcher studying gambling behavior finds that people playing bingo will bet more money when they are allowed to choose their bingo cards than when they do not have this choice. In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. studying gambling behavior

b. amount of money bet

c. ability to choose cards

d. people playing bingo

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

60. A researcher studying the results of the most recent election hypothesizes that people who attend church regularly were more likely to oppose same sex marriage than non-church goers. In this study, the independent variable is best described as \_\_\_\_\_\_.

a. the results of the most recent election

b. beliefs regarding same sex marriage

c. people who attend church regularly

d. church attendance

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

61. A researcher studying the results of the most recent election hypothesizes that people who attend church regularly were more likely to oppose same sex marriage than non-church goers. In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. the results of the most recent election

b. beliefs regarding same sex marriage

c. people who attend church regularly

d. church attendance

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

62. One study examined an Indian theory of architectural design that aligning buildings with the earth’s magnetic field and the movement of the sun leads to positive outcomes for the building’s inhabitants (Travis et al, 2005). More specifically, they hypothesized that homes that have front doors facing the south will experience more burglaries than homes facing the other directions (north, west, east). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. number of burglaries

b. homes

c. location of the front door

d. the earth’s magnetic field and the movement of the sun

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

63. One study examined an Indian theory of architectural design that aligning buildings with the earth’s magnetic field and the movement of the sun leads to positive outcomes for the building’s inhabitants (Travis et al, 2005). More specifically, they hypothesized that homes that have front doors facing the south will experience more burglaries than homes facing the other directions (north, west, east). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. number of burglaries

b. homes

c. location of the front door

d. the earth’s magnetic field and the movement of the sun

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

64. A recent study found that the more impulsive a person is, the more likely he or she will prefer to drink sweet white wines rather than dry white wines (Saliba, Wragg, & Richardson, 2009). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. type of wine preferred

b. level of impulsivity

c. wine drinkers

d. white wine

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

65. A recent study found that the more impulsive a person is, the more likely he or she will prefer to drink sweet white wines rather than dry white wines (Saliba, Wragg, & Richardson, 2009). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. type of wine preferred

b. level of impulsivity

c. wine drinkers

d. white wine

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

66. A study of people who lost their homes in Hurricane Katrina hypothesized that “greater amounts of television viewing (about the hurricane) would predict greater levels of depression” (McLeish & Del Ben, 2008). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. Hurricane Katrina

b. level of depression

c. amount of television viewing

d. whether the person lost his or her home

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

67. A study of people who lost their homes in Hurricane Katrina hypothesized that “greater amounts of television viewing (about the hurricane) would predict greater levels of depression” (McLeish & Del Ben, 2008). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. Hurricane Katrina

b. level of depression

c. amount of television viewing

d. whether the person lost his or her home

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

68. One research study stated that “daughters of divorced parents are hypothesized to exhibit higher levels of promiscuity than sons of divorced parents” (Cooney, 1994). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. divorced parents

b. level of promiscuity

c. gender of child

d. daughters

Ans: C

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

69. One research study stated that “daughters of divorced parents are hypothesized to exhibit higher levels of promiscuity than sons of divorced parents” (Cooney, 1994). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. divorced parents

b. level of promiscuity

c. gender of child

d. daughters

Ans: B

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

70. “College students will rate instructors who dress formally (i.e., business suit and tie) as having more expertise than instructors who dress casually (i.e., slacks and shirt)” (Sebastian & Bristow, 2008). In this study, the independent variable is best described as \_\_\_\_\_\_.

a. instructors’ clothing

b. college students

c. instructors

d. rating of expertise

Ans: A

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

71. “College students will rate instructors who dress formally (i.e., business suit and tie) as having more expertise than instructors who dress casually (i.e., slacks and shirt)” (Sebastian & Bristow, 2008). In this study, the dependent variable is best described as \_\_\_\_\_\_.

a. instructors’ clothing

b. college students

c. instructors

d. rating of expertise

Ans: D

Cognitive Domain: Comprehension

Answer Location: Research Hypotheses and their Independent and Dependent Variables

Difficulty Level: Easy

72. A researcher is analyzing data to understand the difference in men’s and women’s fear of crime. One of the research hypotheses to be tested is: Those who have been prior victims of crime will have higher levels of fear. Which of the following is the dependent variable in the research hypothesis?

a. gender

b. prior victimization

c. fear of crime

d. none of these

Ans: C

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Medium

73. A student at the university is studying the effect of race, class, and gender on one’s view of the death penalty. Which variable would be the dependent variable in this research?

a. race

b. class

c. gender

d. views on the death penalty

Ans: D

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Medium

74. The relationship between samples and populations may be described as \_\_\_\_\_\_.

a. smaller the sample, the more it resembles the population

b. a population is a subset of a sample

c. researchers test research hypotheses about populations by collecting data from samples

d. researchers draw conclusions about samples based on data collected from populations

Ans: C

Cognitive Domain: Application

Answer Location: Drawing a Sample From a Population

Difficulty Level: Medium

75. The relationship between samples and populations may be described as \_\_\_\_\_\_.

a. researchers collect data from populations in order to test hypotheses about samples

b. researchers calculate descriptive statistics on populations and inferential statistics on samples

c. the larger the sample, the more it resembles the population

d. populations are a subset of samples

Ans: C

Cognitive Domain: Application

Answer Location: Drawing a Sample From a Population

Difficulty Level: Easy

76. A person conducting research asks customers at a grocery store, “Which is your favorite snack cracker?” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

77. A researcher asks people to indicate their area code (408, 510, 415, etc.) This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

78. A research asks people to indicate their zip code (35023, 35214, 35466, etc.). This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

79. A researcher asks people whether they are either "in favor", "against", or "not sure" about the war in Iraq. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

80. A political consultant asks voters which candidate they plan on voting for in the upcoming California election. Their answers to his question comprise a variable measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

81. Given the flurry of advertisements regarding the extensiveness of their networks, a pollster asks a group of people whether they feel AT&T, Sprint, or Verizon provides better coverage. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

82. A researcher asks people how often they give blood: “Very often,” “Often,” “Sometimes,” “Rarely,” and “Almost never.” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: B

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

83. At the end of a phone call to a customer service center you’re asked to rate the quality of service you’ve been provided using the following choices: “Poor,” “Fair,” “Good,” “Very Good,” and “Excellent.” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: B

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

84. A teacher asks her students how often they go to church: “Never,” “1–2 times a year,” “Once a month,” “Once a week,” or “More than once a week.” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement

a. nominal

b. ordinal

c. interval

d. ratio

Ans: B

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

85. An instructor asks her students how often they missed class during the semester: “0,” “1 time,” “2–6 times,” “7–15 times,” or “More than 15 times.” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: B

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

86. A kindergarten teacher asks her students how hungry they are: “Not at all,” “Only a little,” “Kind of,” or “Starving.” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement

a. nominal

b. ordinal

c. interval

d. ratio

Ans: B

Cognitive Domain: Application

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Easy

87. The difference between an interval level variable and a ratio level variable is \_\_\_\_\_\_.

a. interval level variables have equal distance along a numeric continuum

b. interval level variables have a true zero point

c. ratio level variables have a true zero point

d. ratio level variables do not allow for a greater number of comparisons

Ans: C

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Hard

88. A researcher gives several high school students the SAT to compare the scores of males and females. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: C

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

89. A research asks people on a scale of 1–20 how much do they fear becoming a victim of a violent crime. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: C

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

90. A researcher is interested in understanding the IQ scores of delinquents compared to non-delinquents. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: C

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

91. A researcher asks people how much money they have given to the tsunami relief effort. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

92. Imagine I ask you, “How much time did you spend (in minutes) studying for this exam?” Your answer to this question may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

93. A hungry instructor who forgot his wallet asks the students in his class to take out and count the change (coins) they have in their pockets. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

94. For the variable in my study (Variable ‘X’), I can say that someone with a score of 30 has 5 times more ‘X’ than someone with a score of 6. If so, Variable ‘X’ is measured at the \_\_\_\_\_\_ level of measurement

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

95. A researcher studying college students asks them to tell him how many dates they have gone on in the last month. This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

96. A researcher asks people, “How many hours do you spend driving to and from school each week?” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

97. A recent newspaper article described a cafe that asked patrons to turn off their phones and actually talk to each other. Consequently, a researcher asks a group of people, “How many times a day do you check your Facebook account?” This variable may best be described as being measured at the \_\_\_\_\_\_ level of measurement.

a. nominal

b. ordinal

c. interval

d. ratio

Ans: D

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Medium

98. A \_\_\_\_\_\_ variable such as “favorite brand of beer” is measured at the \_\_\_\_\_\_ level of measurement

a. qualitative; ratio

b. continuous; ordinal

c. categorical; nominal

d. quantitative; ordinal

Ans: C

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Hard

99. A \_\_\_\_\_\_ variable such as “type of car driven” is measured at the \_\_\_\_\_\_ level of measurement.

a. categorical; nominal

b. continuous; nominal

c. categorical; interval

d. continuous; ratio

Ans: A

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Hard

100. A \_\_\_\_\_\_ variable such as “how likely are you to agree with the following statement (strongly agree, agree, disagree, strongly disagree) is measured at the \_\_\_\_\_\_ level of measurement.

a. categorical; nominal

b. categorical; ordinal

c. categorical; interval

d. continuous; ratio

Ans: A

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Hard

101. One way of deciding whether a variable is measured at the ratio rather than nominal level of measurement involves \_\_\_\_\_\_ two values of the variable.

a. dividing

b. subtracting

c. summing

d. comparing

Ans: A

Cognitive Domain: Comprehension

Answer Location: Determining How Variables will Be Measured: Levels of Measurement

Difficulty Level: Hard

102. The main purpose of using random assignment in a research study is to \_\_\_\_\_\_.

a. increase the ability to make cause–effect inferences between variables

b. increase the external validity of a study

c. increase the ability to generalize the results of a study to a larger population

d. make the sample resemble the population as closely as possible

Ans: A

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

103. Random assignment assigns participants to each category of an independent variable in such a way that each participant has a(n) \_\_\_\_\_\_ chance of being assigned to each category.

a. higher

b. lower

c. equal

d. confounding

Ans: C

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

104. A variable that provides an alternative explanation for the relationship between the independent and dependent variables is a(n) \_\_\_\_\_\_.

a. control variable

b. confounding variable

c. continuous variable

d. intervening variable

Ans: B

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

105. What research method is designed to measure naturally occurring relationships between variables without the ability to infer cause–effect relationships?

a. experimental

b. non-experimental

c. descriptive

d. inferential

Ans: B

Cognitive Domain: Knowledge

Answer Location: Non-Experimental Research Methods

Difficulty Level: Easy

106. What type of non-experimental research method obtains information directly from a group of people regarding their opinions, beliefs, or behaviors?

a. quasi-experimental research

b. survey research

c. observational research

d. archival research

Ans: B

Cognitive Domain: Comprehension

Answer Location: Survey Research

Difficulty Level: Medium

107. If you were to analyze data from written police records from 2000 until 2010, you would be engaging in what type of research?

a. experimental research

b. survey research

c. observational research

d. archival research

Ans: D

Cognitive Domain: Comprehension

Answer Location: Archival Research

Difficulty Level: Easy

108. If you were to give a questionnaire to a group of people asking them about their criminal acts, what type of research are you engaging in?

a. experimental research

b. survey research

c. observational research

d. archival research

Ans: B

Cognitive Domain: Comprehension

Answer Location: Survey Research

Difficulty Level: Easy

109. Which type of research involves the systematic and objective observation of naturally occurring behavior or events?

a. quasi-experimental research

b. survey research

c. observational research

d. archival research

Ans: C

Cognitive Domain: Comprehension

Answer Location: Observational Research

Difficulty Level: Easy

110. What type of research uses records or documents of the activities of individuals, groups, or organizations to examine research questions of hypotheses?

a. quasi-experimental research

b. survey research

c. observational research

d. archival research

Ans: D

Cognitive Domain: Comprehension

Answer Location: Archival Research

Difficulty Level: Easy

111. What type of research compares naturally formed or preexisting groups rather than employing random assignment to conditions?

a. quasi-experimental research

b. survey research

c. observational research

d. archival research

Ans: A

Cognitive Domain: Comprehension

Answer Location: Observational Research

Difficulty Level: Easy

112. What type of research design would be used to compare parents who spank and those who do not on their children’s aggressive behavior?

a. quasi-experimental research

b. survey research

c. observational research

d. archival research

Ans: A

Cognitive Domain: Application

Answer Location: Observational Research

Difficulty Level: Hard

113. The main purpose of \_\_\_\_\_\_ statistics is to \_\_\_\_\_\_.

a. inferential; prove theories

b. descriptive; test hypotheses about populations

c. inferential; identify outliers

d. descriptive; summarize a set of data for a variable

Ans: D

Cognitive Domain: Knowledge

Answer Location: Calculating Descriptive Statistics

Difficulty Level: Easy

114. \_\_\_\_\_\_ summarize data for a variable while \_\_\_\_\_\_ test hypotheses and draw conclusion from data.

a. inferential statistics; descriptive statistics

b. descriptive statistics; inferential statistics

c. inferential statistics; predictive statistics

d. descriptive statistics; predictive statistics

Ans: B

Cognitive Domain: Knowledge

Answer Location: Calculating Inferential Statistics

Difficulty Level: Easy

# True/False

1. Statistics can be defined as a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data.

Ans: T

Cognitive Domain: Knowledge

Answer Location: What is Statistics?

Difficulty Level: Easy

2. Statistics only deals with the collection of the data.

Ans: F

Cognitive Domain: Knowledge

Answer Location: What is Statistics?

Difficulty Level: Easy

3. The independent variable may be thought of as effect within the research hypothesis.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Stating a Research Hypothesis: Independent and Dependent Variables

Difficulty Level: Easy

4. Confounding variables are variables that provide an alternative explanation for the relationship between the independent and dependent variables.

Ans: T

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

5. Including a control group is the only way to reduce the influence of confounding variables in an experiment.

Ans: F

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

6. A strategy used to minimize the influence of confounding variables is random assignment.

Ans: T

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

7. The only strategy that can be used to minimize the influence of confounding variables is random assignment.

Ans: F

Cognitive Domain: Knowledge

Answer Location: Experimental Research Methods

Difficulty Level: Easy

8. Observational research allows a researcher to study behaviors or events in which the researcher does not deliberately manipulate the phenomenon.

Ans: T

Cognitive Domain: Knowledge

Answer Location: Observational Research

Difficulty Level: Easy

9. A researcher who analyzes prison records of inmates who committed violent assaults while incarcerated is conducting survey research.

Ans: F

Cognitive Domain: Knowledge

Answer Location: Observational Research

Difficulty Level: Easy

10. A researcher who analyzes court records of juveniles who committed felony offenses is conducting archival research.

Ans: T

Cognitive Domain: Knowledge

Answer Location: Observational Research

Difficulty Level: Easy

11. A researcher studying attitudes toward immigration by asking respondents whether they support DACA or not is an example of survey research.

Ans: T

Cognitive Domain: Knowledge

Answer Location: Observational Research

Difficulty Level: Easy