

1. What do sociology, geology, and psychology have in common?
  - A) All three use the scientific method.
  - B) All three study how humans think, feel, and behave.
  - C) All three focus on unanswerable questions.
  - D) All three are based on subjective reasoning.
  
2. The scientific method relies on:
  - A) personal experience to inform theory.
  - B) making observations to answer questions.
  - C) anecdotal evidence to answer questions.
  - D) intuition as evidence.
  
3. Which of the following is NOT an example of empirical research?
  - A) examining IQ using a standardized test
  - B) measuring passionate love using a self-report measure
  - C) investigating gender differences in athleticism
  - D) assessing whether someone has behaved well enough to get into heaven
  
4. Which of the following could be examined using empirical research?
  - A) Bigfoot
  - B) the Loch Ness Monster
  - C) vampires
  - D) great white sharks
  
5. Why are most philosophical questions poorly suited for empirical investigation?
  - A) Philosophy is not an important discipline.
  - B) Most philosophical questions cannot be objectively measured.
  - C) Empirical investigations can only test unobservable behaviors.
  - D) Philosophy is inherently unscientific and thus does not necessitate investigation.
  
6. What is the best way for a researcher to empirically investigate a psychological phenomenon?
  - A) nonscientifically
  - B) using observable behaviors to make assumptions about underlying psychological states
  - C) by asking participants' friends and family for their opinions
  - D) by having participants complete self-report measures

7. Of the following, which comes first in the research process?
- A) recruit participants
  - B) analyze data
  - C) conduct a literature review
  - D) draw conclusions
8. How does a researcher know if he/she has picked a good research question?
- A) It interests him/her.
  - B) It is culturally relevant.
  - C) Others are also investigating the same phenomenon.
  - D) No one is investigating that topic.
9. During a meeting, your research advisor says, "Remember, you don't have to reinvent the wheel." His use of this axiom is most likely referring to the importance of \_\_\_\_\_ in developing your hypothesis.
- A) personal experience
  - B) introspection
  - C) anecdotal evidence
  - D) the literature search
10. Savannah is a psychologist interested in finding empirically verified information to guide the development of her research hypothesis. Which of the following should she use?
- A) an Internet search engine
  - B) peer-reviewed journal articles
  - C) nonfiction books
  - D) personal websites and blogs
11. In peer review, who evaluates a psychologist's work?
- A) other psychologists who are experts within that area of study
  - B) medical doctors
  - C) the Internal Review Board (IRB)
  - D) the researcher's collaborators
12. One benefit of attending a research conference is that data presented at conferences are most likely from studies conducted in the past few:
- A) months.
  - B) years.
  - C) decades.
  - D) centuries.

13. Which step in the research process is akin to a “fact-checker”?
- A) recruit participants
  - B) analyze data
  - C) draw conclusions
  - D) peer review
14. An example of a database where psychologists can find peer-reviewed journal articles is:
- A) Google.
  - B) Bing.
  - C) PsycINFO.
  - D) LexisNexis.
15. What is a hypothesis?
- A) an educated prediction that provides a testable explanation of a phenomenon
  - B) a statement based on repeated experimental observation that describes some aspect of the world
  - C) a well-substantiated explanation of some aspect of the natural world confirmed through repeated observation and experimentation
  - D) a manner for determining how a researcher will use variables in his/her study
16. As compared with a theory, a hypothesis is:
- A) broader and more substantiated.
  - B) narrower and less substantiated.
  - C) the same scope, but more substantiated.
  - D) narrower and more substantiated..
17. What is a scientific law?
- A) an educated prediction that provides a testable explanation of a phenomenon
  - B) a well-substantiated explanation of some aspect of the natural world confirmed through repeated observation and experimentation
  - C) a manner for determining how a researcher will use variables in his/her study
  - D) a statement based on repeated experimental observation that describes some aspect of the world

18. Psychology has \_\_\_\_\_ scientific laws and \_\_\_\_\_ scientific theories.
- A) few; few
  - B) few; many
  - C) many; few
  - D) many; many
19. What is a scientific theory?
- A) an educated prediction that provides a testable explanation of a phenomenon
  - B) a statement based on repeated experimental observation that describes some aspect of the world
  - C) a manner for determining how a researcher will use variables in his/her study
  - D) a well-substantiated explanation of some aspect of the natural world confirmed through repeated observation and experimentation
20. Theory is to law as:
- A) explain is to describe.
  - B) describe is to explain.
  - C) test is to explain.
  - D) describe is to test.
21. Each of the following is a strategy for generating a hypothesis, EXCEPT:
- A) introspection.
  - B) finding the exception to the rule.
  - C) thinking of things unilaterally.
  - D) thinking about variables in terms of amount or degrees.
22. Which approach for generating a hypothesis would ask, "What would I do?"
- A) introspection
  - B) find the exception to the rule
  - C) change the directionality
  - D) think about variables in terms of amount or degrees
23. Tovah owns a bakery and wants to make doughnuts in a new color to catch people's attention. She decides that purple is her best option, since it is her favorite color. In this example, Tovah is using which strategy to develop a hypothesis?
- A) introspection
  - B) find the exception to the rule
  - C) change the directionality
  - D) think about variables in terms of amount or degrees

24. Dasha is a developmental psychologist who is interested in investigating the relationship between parents and their children. A literature search revealed that more flexible parenting styles led to happier children. However, Dasha is curious whether children with good temperaments lead to more flexible parenting styles. In this instance, Dasha is demonstrating which strategy for generating a hypothesis?
- A) introspection
  - B) find the exception to the rule
  - C) change the directionality
  - D) think about variables in terms of amount or degrees
25. Occam's razor corresponds to which characteristic of a good hypothesis?
- A) specificity
  - B) being grounded in previous research
  - C) parsimony
  - D) falsifiability
26. \_\_\_\_\_ is the erroneous tendency for people to believe that general descriptions of their personality are highly accurate and tailored specifically for them.
- A) The Barnum effect
  - B) The Bailey effect
  - C) Parsimony
  - D) Occam's razor
27. Endorsement of horoscopes is likely the result of:
- A) Occam's razor.
  - B) the Bailey effect.
  - C) parsimony.
  - D) the Barnum effect.
28. Good hypotheses must be:
- A) general.
  - B) falsifiable.
  - C) vague.
  - D) bidirectional.

29. The text describes work by Dr. Benjamin Rush, a famous 18th century American physician, who hypothesized that bloodletting was the best treatment for those suffering from a high fever. Dr. Rush's technique, which was often more dangerous than the fever itself, demonstrates how \_\_\_\_\_ may be an issue for hypotheses that are not falsifiable.
- A) confirmation bias
  - B) the Barnum effect
  - C) Occam's razor
  - D) the better-than-average effect
30. The problem with many of Freud's postulations was that they were not:
- A) interesting.
  - B) unique.
  - C) culturally relevant.
  - D) falsifiable.
31. Sunny is interested in testing the hypothesis that accidents are a matter of repressed desires. To test this, she asks participants about recent accidents and their corresponding causes. Just as she suspected, her participants are unaware of the connection between their accidents and unconscious desires. She interprets her findings as support for her hypothesis that people are unaware that their own desires are causing their accidents. What is wrong with her research?
- A) Sunny's hypothesis cannot be disproved.
  - B) There is no criterion variable in her study.
  - C) Sunny does not adequately manipulate the independent variable.
  - D) Sunny does not use a longitudinal design.
32. Thaddeus is a graduate student in a health psychology program. He decides that for his dissertation project he is going to replicate one of his advisor's studies, but extend the original hypothesis. Instead of just investigating the role of exercise on risk for heart disease, he wants to examine how much exercise is optimally beneficial. To do so, he examines quantity and intensity of the exercise. Which of the following strategies is Thaddeus using to develop a good hypothesis?
- A) the exception to the rule
  - B) a matter of degree
  - C) introspection
  - D) change in directionality

33. How does a researcher decide which research method to use?
- A) They let the research question guide the choice of methodology and analysis.
  - B) They use whatever methodology everyone else is using.
  - C) They use the newest methodology and analysis techniques available.
  - D) They use the same methodology that they have always used, because researchers are only trained in one type of technique.
34. What is a variable?
- A) an exact listing of steps a researcher takes when collecting data
  - B) a factor that does not change and remains consistent
  - C) an element that the experimenter expects to change
  - D) an observation that has been replicated many times with the same result
35. What is a constant?
- A) an element that the experimenter expects to change
  - B) a factor that does not change and remains consistent
  - C) the exact steps a researcher takes when collecting data
  - D) an observation that has been replicated many times with the same result
36. A \_\_\_\_\_ is an element that the experimenter expects to change, vary, or that can have several different values, whereas a \_\_\_\_\_ is a factor that does not change and remains consistent.
- A) constant; script
  - B) variable; level
  - C) variable; constant
  - D) constant; variable
37. A conceptual definition is:
- A) the aspect of the experiment that is manipulated by the experimenter.
  - B) a definition of how variables will be used in the study.
  - C) the causal variable in a nonexperimental design.
  - D) defining a variable in theoretical terms, as it relates to the study.
38. What is an operational definition?
- A) the aspect of the experiment that is manipulated by the experimenter
  - B) a definition of how variables will be used in the study
  - C) the causal variable in a nonexperimental design
  - D) defining a variable in theoretical terms, as it relates to the study

39. Researchers generally decide on the conceptual definition \_\_\_\_\_ they develop an operational definition.
- A) before
  - B) after
  - C) while
  - D) with no regard for how
40. A definition of how variables will be used in the study is known as the:
- A) variable.
  - B) constant.
  - C) conceptual definition.
  - D) operational definition.
41. In an experiment designed to assess whether weight loss causes increased self-esteem, an acceptable operational definition for the dependent variable would be:
- A) how much weight in pounds participants lost.
  - B) participants' self-reported levels of esteem.
  - C) objective raters' evaluations of the participants' confidence.
  - D) objective raters' evaluations of the participants' weight loss.
42. Lucy believes that halogen light bulbs lead to better visual acuity than incandescent light bulbs. How would she operationally define the independent variable in her study?
- A) type of light bulb
  - B) self-report of visual acuity
  - C) behavioral measure of participants' visual acuity
  - D) participants' natural eyesight
43. If you want to design a study that focuses on *why* something occurs, then you will likely use a(n) \_\_\_\_\_ design.
- A) nonexperimental
  - B) experimental
  - C) correlational
  - D) longitudinal design
44. In an experiment, the researcher \_\_\_\_\_ the independent variable and \_\_\_\_\_ the dependent variable.
- A) measures; manipulates
  - B) manipulates; observes
  - C) measure; holds constant
  - D) manipulates; holds constant



45. An independent variable is a variable that:
- A) is manipulated by the experimenter.
  - B) is measured by the experimenter.
  - C) is the causal variable in a nonexperimental design.
  - D) is the outcome variable in a nonexperimental design.
46. In an experiment, the \_\_\_\_\_ variable is measured, while the \_\_\_\_\_ is manipulated.
- A) criterion; predictor
  - B) predictor; criterion
  - C) independent; dependent
  - D) dependent; independent
47. Cedric is designing an experiment to examine the effectiveness of a new hearing aid on auditory ability. He hopes to show that this newly designed model outperforms the currently available model. In his study, the dependent variable is the:
- A) type of hearing aid.
  - B) user's auditory ability.
  - C) new design.
  - D) currently available design.
48. Caroline's mother refuses to let her go out of the house with wet hair. In an effort to prove to her mother that wet hair does not cause illness she designs an experiment. Which of the following would be her dependent variable?
- A) wet hair
  - B) dry hair
  - C) physical health
  - D) the weather outside of the house
49. Ali is a graduate student who is designing a study to examine the impact of weather on mood. Which of the following would be an appropriate operational definition of her dependent variable?
- A) number of rainy days compared with number of sunny days across the study period
  - B) average daily temperature measured in Fahrenheit
  - C) participants' ratings on a self-report mood scale
  - D) a background measure of how happy participants are prior to participation

50. In an experiment examining the impact of sleep on academic performance, how might Yetta operationalize her independent variable?
- A) performance on a standardized IQ test
  - B) participants' most recent SAT scores
  - C) number of hours each participant sleeps the night before the study
  - D) the number of hours participants sleep on average
51. If Tawny is interested in describing *what* is happening between two variables, then she should use a(n):
- A) experiment.
  - B) correlational design.
  - C) independent samples t-test.
  - D) cause-and-effect relationship.
52. Independent and dependent variables are to experiment as:
- A) variable and constant are to nonexperimental design.
  - B) predictor and criterion variables are to nonexperimental design.
  - C) conceptual and operational definition are to correlational design.
  - D) informed consent and debriefing are to correlational design.
53. If Salima begins working with a colleague on a study that has neither an independent nor dependent variable, she is most likely conducting a(n):
- A) experiment.
  - B) two-group design study.
  - C) matched-pair study.
  - D) correlational study.
54. In a nonexperimental design the \_\_\_\_\_ is the potential causal variable, whereas the \_\_\_\_\_ is the outcome variable.
- A) predictor; constant
  - B) predictor; criterion
  - C) response; predictor
  - D) constant; predictor
55. \_\_\_\_\_ is to independent variable as \_\_\_\_\_ is to dependent variable.
- A) Criterion; predictor
  - B) Criterion; constant
  - C) Predictor; criterion
  - D) Predictor; constant

56. \_\_\_\_\_ design is to what, as \_\_\_\_\_ design is to why.
- A) Experimental; interview
  - B) Experimental; nonexperimental
  - C) Nonexperimental; interview
  - D) Nonexperimental; experiment
57. The \_\_\_\_\_ is the potential causal variable in a nonexperimental design.
- A) independent variable
  - B) dependent variable
  - C) predictor variable
  - D) criterion variable
58. The criterion variable is the:
- A) potential causal variable in a nonexperimental design.
  - B) outcome variable in a nonexperimental design.
  - C) variable that the experimenter manipulates.
  - D) variable that the experimenter measures.
59. Predictor variables are also known as:
- A) criterion variables.
  - B) response variables.
  - C) explanatory variables.
  - D) dependent variables.
60. Criterion variables are also known as:
- A) predictor variables.
  - B) response variables.
  - C) conceptual variables.
  - D) dependent variables.
61. Predictor is to explanatory as:
- A) criterion is to response.
  - B) criterion is to independent.
  - C) response is to independent.
  - D) dependent is to response.

62. Statistically significant results from a nonexperimental study inform the researcher that:
- A) the independent variable caused the dependent variable.
  - B) the predictor variable caused the criterion variable.
  - C) one variable caused a change in another variable.
  - D) two variables are associated in some way.
63. Operational definitions are a critical part of:
- A) experimental designs.
  - B) nonexperimental designs.
  - C) both experimental and nonexperimental designs.
  - D) neither experimental nor nonexperimental designs.
64. Each of the following is a reason why Dante may choose to use a nonexperimental research design, EXCEPT:
- A) it would be unethical to manipulate the independent variable in his study.
  - B) it is not possible to experimentally manipulate his independent variable.
  - C) Dante is unsure of the direction of causality between his variables.
  - D) to establish a cause-and-effect relationship between his variables.
65. If it is unethical to manipulate a variable, then
- A) you cannot examine it.
  - B) you cannot examine it with a nonexperimental design.
  - C) you cannot examine it with an experimental design.
  - D) you can use either a nonexperimental or experimental design, but you need IRB approval.
66. Ming wants to investigate whether there is a relationship between narcissism and bathing suit selection. She hypothesizes that people higher in narcissism are more likely to wear a two-piece as compared to a one-piece swimsuit. If she observes women on a beach and then administers a narcissism measure to each one, what type of study is she conducting?
- A) within-subjects
  - B) longitudinal
  - C) experimental
  - D) nonexperimental

67. For which of the following would a researcher use an experimental design?
- A) examining the impact of divorce on mental stability
  - B) investigating the effect of alcohol consumption of fetal development
  - C) examining the influence of birth order on confidence
  - D) assessing the effect of wall color on mood
68. When might a researcher use a survey?
- A) to establish cause and effect
  - B) when interested in verbal responses and explanations to structured questions
  - C) to acquire responses and ratings to many questions
  - D) when conducting an in-depth investigation of a single person
69. Surveys and interviews are examples of:
- A) nonexperimental designs.
  - B) between-subjects designs.
  - C) within-subjects designs.
  - D) experimental designs.
70. In a between-subjects design, researchers assess their participants how many times?
- A) zero times
  - B) once
  - C) twice
  - D) three or more
71. Nadya is trying to determine what vegetables will grow best in her garden. She decides to plant four different types of vegetables and then conduct a systematic observation to determine which ones thrive in that environment. She is using which research design to answer her question?
- A) within-subjects
  - B) between subjects
  - C) longitudinal
  - D) nonexperimental
72. A longitudinal study uses a(n) \_\_\_\_\_ design.
- A) experimental
  - B) nonexperimental
  - C) between-subjects
  - D) within-subjects

73. A between-subjects research design assesses participants \_\_\_\_\_ time(s), whereas a within-subjects research design assesses participants \_\_\_\_\_ time(s).
- A) one; zero
  - B) one; multiple
  - C) multiple; zero
  - D) multiple; one
74. Angelique would like to conduct a longitudinal study to assess college students' emotional maturity. Which of the following should she do?
- A) assess students at the start of each of their four years at college and compare scores
  - B) measure and compare the emotional maturity of siblings who are both in college
  - C) complete a twin-study where she measures and compares the emotional maturity of identical and fraternal twins during their junior year of college
  - D) compare the emotional maturity of college freshmen with that of college seniors
75. In an experiment there are always different levels of the:
- A) dependent variable.
  - B) criterion variable.
  - C) independent variable.
  - D) predictor variable.
76. Between-subjects design is to within-subject design as:
- A) single is to multiple.
  - B) difficult is to simple.
  - C) subjective is to objective.
  - D) independent is to dependent.
77. Garrick wants to understand how soldiers are affected by their time at war. To do this, he assesses military personnel as they complete boot camp and then again after they complete their first tour of duty. Garrick has chosen to use which type of research design?
- A) between-subjects
  - B) nonexperimental
  - C) cross-sectional
  - D) longitudinal

78. \_\_\_\_\_ is a detailed series of steps that lets the researcher know the order in which to administer the study and provides a script of what the researcher should say and do.
- A) Informed consent
  - B) A researcher notes
  - C) A research protocol
  - D) Debriefing
79. When is the ethical review of a study by the IRB conducted?
- A) before data collection
  - B) after data collection
  - C) during data analysis
  - D) after data analysis
80. The ethical review is designed to ensure:
- A) costs outweigh benefits.
  - B) benefits outweigh costs.
  - C) the study contains no deception.
  - D) the study has no cost.
81. Which of the following is an ethical obligation of psychological studies?
- A) compensation
  - B) written acknowledgment in any subsequent research publications
  - C) informed consent
  - D) health benefits to study participants
82. \_\_\_\_\_ is a part of the standard ethical procedures at the beginning of a research study in which the participant learns about what the study expects of them, is told the risks and benefits of participating, and then freely makes the choice about whether to participate.
- A) Research protocol
  - B) Debriefing
  - C) Informed consent
  - D) Researcher notes
83. Debriefing is:
- A) a detailed series of steps that lets the researcher know the order in which to administer the study.
  - B) the explanation of the purpose of the study and disclosure of any deception used.
  - C) an explanation of the risks and benefits of participating in the study.
  - D) a list of participant numbers that includes group assignment and any notes regarding participants' experiences.

84. Informed consent is to debriefing as:
- A) beginning is to end.
  - B) finish is to start.
  - C) information is to action.
  - D) truth is to lie.
85. Each of the following is a part of the informed consent EXCEPT:
- A) potential risks.
  - B) anticipated benefits.
  - C) agreement to participate.
  - D) detail of all deception used in the study.
86. Which of the following is designed to ensure that participants take part in the study voluntarily?
- A) debriefing
  - B) research protocol
  - C) script
  - D) informed consent
87. The distinct pieces of information that a researcher collects from participants during a research study are called:
- A) constants.
  - B) data.
  - C) statistics.
  - D) protocols.
88. Researchers make design decisions about how to conduct a study and this in turn impact the data collected. The type of data then determines a researcher's:
- A) analytic strategy.
  - B) research protocol.
  - C) script.
  - D) informed consent.
89. Statistics are necessary because:
- A) accurately detecting patterns in data is easy.
  - B) qualitative research is not scientific.
  - C) they help scientists to overcome biases in human processing.
  - D) they enhance the likelihood of making errors.



90. To create statistics, researchers need to transform information into:
- A) numbers.
  - B) letters.
  - C) words.
  - D) scripts.
91. Statistical tests provide researchers with:
- A) universal truths.
  - B) probabilistic conclusions about the relationship between variables.
  - C) absolute certainty.
  - D) unreliable conclusions about the relationship between variables.
92. To establish probabilistic conclusions about the relationship between variables, researchers use:
- A) statistical tests.
  - B) introspection.
  - C) intuition.
  - D) educated guesses.
93. In order to have confidence in a finding, researchers look for \_\_\_\_ certainty that results are not due to random chance.
- A) 5%
  - B) 25%
  - C) 50%
  - D) 95%
94. Otto is examining whether paying for purchases in cash leads to less spending than paying for purchases with a credit card. His analyses reveal a statically significant difference between groups. In interpreting his results, he is likely to say that his study \_\_\_\_\_ that using cash for purchases leads to less spending.
- A) proves
  - B) disproves
  - C) suggests
  - D) challenges the claim
95. The final step in the research process is to:
- A) recruit participants.
  - B) analyze data.
  - C) communicate findings.
  - D) conduct an ethical review of the study.

96. Poster is to paper presentation as:
- A) oral is to written.
  - B) written is to visual.
  - C) verbal is to visual.
  - D) visual is to verbal.
97. Why might a researcher consider it easier to publish a book than a journal article?
- A) research articles are not peer-reviewed
  - B) books are not peer-reviewed
  - C) research articles are subjective
  - D) books are shorter
98. Where would someone look to find the most cutting-edge empirical findings?
- A) academic journal
  - B) book
  - C) research conference
  - D) infomercials
99. Movie-trailer is to the feature-length film as:
- A) conference presentation is to peer-reviewed publication.
  - B) peer-reviewed publication is to research poster.
  - C) research poster is to mainstream book.
  - D) academic book to paper presentation.
100. Which of the following is the most empirically sound?
- A) research poster
  - B) journal article
  - C) edited book
  - D) website

## Answer Key

1. A
2. B
3. D
4. D
5. B
6. D
7. C
8. A
9. D
10. B
11. A
12. A
13. D
14. C
15. A
16. B
17. D
18. B
19. D
20. A
21. C
22. A
23. A
24. C
25. C
26. A
27. D
28. B
29. A
30. D
31. A
32. B
33. A
34. C
35. B
36. C
37. D
38. B
39. A
40. D
41. B
42. A
43. B
44. B

45. A
46. D
47. B
48. C
49. C
50. C
51. B
52. B
53. D
54. B
55. C
56. D
57. C
58. B
59. C
60. B
61. A
62. D
63. C
64. D
65. C
66. D
67. D
68. C
69. A
70. B
71. B
72. D
73. B
74. A
75. C
76. A
77. D
78. C
79. A
80. B
81. C
82. C
83. B
84. A
85. D
86. D
87. B
88. A
89. C
90. A

- 91. B
- 92. B
- 93. D
- 94. C
- 95. C
- 96. D
- 97. B
- 98. C
- 99. A
- 100. B