

Chapter 16-18 Q & A

MKT572

Question

What is the purpose of hypothesis testing?

A.to draw conclusive decisions about sample estimates

B.to determine whether there is support to draw conclusions about some characteristics of the population given the evidence provided by the sample results

C.to summarize and describe the sample data

D.to test whether the sample is scientifically drawn from a target population

E.to conduct statistical tests on census data

Answer

- Ans: B

Question

- The hypothesis of the status quo is typically referred to as the _____ hypothesis.
- A. type III
 - B. alternative
 - C. statistical
 - D. null
 - E. valid

Answer

- Ans: D

Question

What is the meaning of testing a hypothesis at an alpha level of 0.05?

- A. There is 95% confidence that the observed results are due to sampling error or because of sample randomness.
- B. The chances of not rejecting the null hypothesis when it is false is more than 5%.
- C. There is a 95% chance that the observed result from the sample analysis will also occur in the population.
- D. The probability of committing a Type II error is about 5%.
- E. There is 95% chance of a gamma error.

Answer

- Ans: C

Question

Hypotheses about frequency distributions that involve one or more nominally scaled variables can be tested using _____.

- a. chi-square test
- b. t-test
- c. f-test
- d. z-test
- e. ANOVA test

Answer

- Ans: A

Question

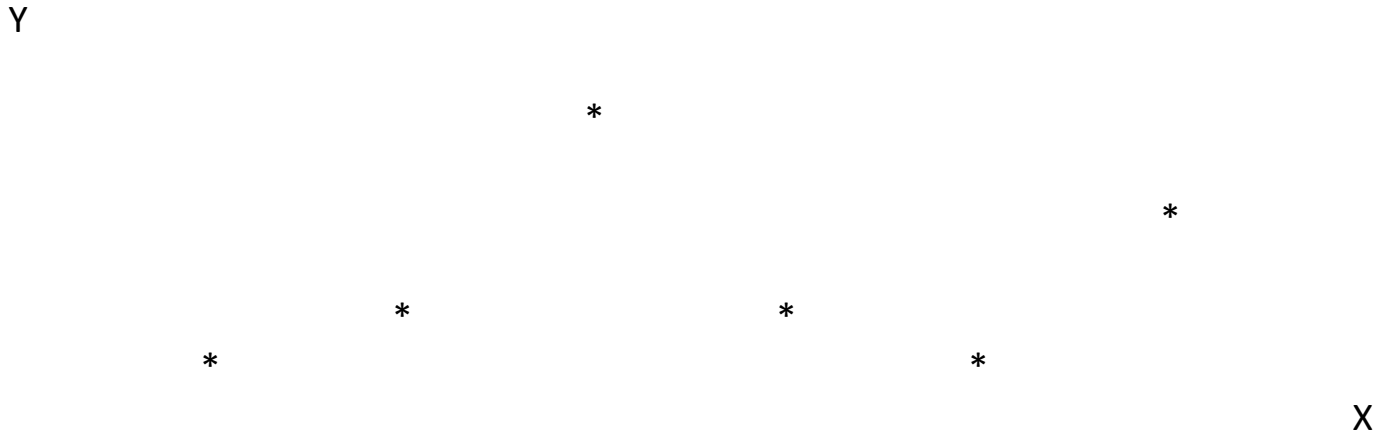
Researchers must be careful to distinguish statistical significance from:

- a. mathematical significance.
- b. chance significance.
- c. practical significance.
- d. random significance.

Answer

- Ans: C

Question



Given this plot, which of the following provides the best description?

- a. perfect linear association
- b. strong exponential association
- c. strong parabolic association
- d. no association
- e. strong curvilinear association

Answer

Ans: D

Question

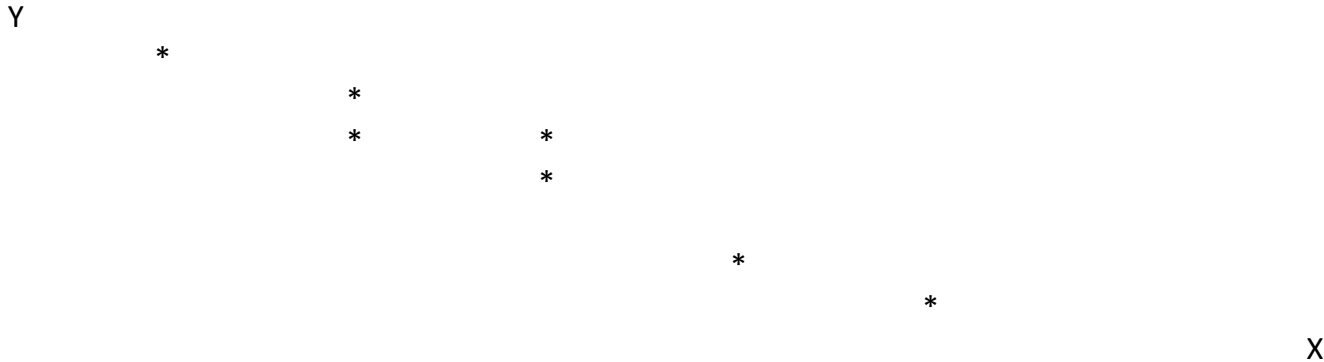
When two variables are not correlated at all, the correlation coefficient would be _____.

- a. -1
- b. 0
- c. 1
- d. -2
- e. 0.5

Answer

- Ans: B

Question



Given this plot, which of the following provides the best description?

- a. strong inverse linear association
- b. strong exponential association
- c. strong parabolic association
- d. no association
- e. strong curvilinear association

Answer

- Ans: A

Question

_____ are statistical methods of analyzing the relationship between two variables.

- a. Bivariate techniques
- b. Univariate techniques
- c. Multivariate techniques
- d. None of these

Answer

- Ans: A

Question

Interpret the correlation coefficient for the following data:

<u>Sales</u>	<u>Sales Training Score</u>
45,000	98
34,500	74
23,750	57
51,450	99
41,000	85

The resulting correlation coefficient is $+0.98$ and the probability of insignificance is 1%.

Answer

Ans: There is a strong positive correlation between sales and sales training scores. Hence, higher sales are associated with higher sales training scores and vice-versa.

Question

The coefficient of determination is normally associated with which of the following multivariate procedures?

- a. multiple regression analysis
- b. factor analysis
- c. conjoint analysis
- d. cluster analysis

Answer

Ans: A

Question

A dependent variable is coded 1=respondent did purchase and 0=respondent did not purchase. Independent variables include various demographic and lifestyle characteristics of the respondents. The goal of the analysis is to determine how respondents who did purchase are different from respondents who did not purchase. Which of the following procedures goes with the preceding description?

- a. multiple discriminant analysis
- b. multiple regression analysis
- c. cluster analysis
- d. perceptual mapping

Answer

Ans: A

Question

Suppose an analyst wanted to determine whether or not dollars spent on advertising, number of sales people, number of new products introduced, and dollars spent on research and development were contributing to the growth in company market share. Which of the following procedures would be most appropriate?

- a. conjoint analysis
- b. cluster analysis
- c. multiple regression analysis
- d. perceptual mapping

Answer

Ans: C

Question

_____ is a measure of the percentage of the variation in the dependent variable that is explained by the variation in the independent variables.

- a. Discriminant weights
- b. Factor loadings
- c. Coefficient of determination
- d. Coefficient of correlation

Answer

- Ans: C

Question

Dummy variables created to include nominally scaled variables in an analysis are commonly used in:

- a. multiple discriminant analysis.
- b. factor analysis.
- c. conjoint analysis.
- d. multiple regression analysis.

Answer

Ans: D

Question

Which of the following is multiple discriminant analysis most similar to?

- a. multiple regression analysis
- b. factor analysis
- c. conjoint analysis
- d. cluster analysis

Answer

- Ans: A

Question

If the goal is to classify business travelers into distinct groups based on their responses to 20 questions on preferences to mode of transportation, hotel accommodation, and ethnic food, which of the following techniques would be most appropriate?

- a. multiple regression analysis
- b. conjoint analysis
- c. cluster analysis
- d. factor analysis

Answer

Ans: C

Question

All of the following are techniques for multivariate analysis procedure except _____.

- a. Cluster analysis
- b. Factor analysis
- c. Conjoint analysis
- d. Bivariate Regression analysis

Answer

- Ans: D

Question

- An advertising agency has been doing work for a client selling widgets. The three-month campaign has produced a low correlation between advertising expenditures and sales for its client. Hence, the client is considering firing the ad agency. The ad agency counters that consumer sales are not a fair assessment of the effectiveness of the ad campaign after only three months. They counter with an analysis of advertising expenditures in relation to number of requests for information about the widgets; number of distributors stocking widgets; and number of retailers requesting shipments of widgets. The ad agency has a database with such information. What kind of analysis would best assist the ad agency in making their case for the effectiveness of their ad campaign?

Answer

- Ans: Since the ad agency wants to show that advertising expenditures are strongly related to the requests for information about widgets, number of distributors stocking widgets, and number of retailers requesting shipments of widgets, they should invoke a multiple regression analysis.

Question

- Describe the potential problem of collinearity and multiple regression. How might a researcher test for collinearity? If collinearity is a problem, what should the researcher do?

Answer

- Collinearity refers to the condition when a significant correlation exists between two or more independent variables. This condition reduces the statistical power of significance tests for the regression coefficients. One can test for collinearity by examining the correlation matrix. If there is a value higher than .30, the researcher should consider corrective action. This correction might be accomplished by dropping one of the correlated variables, or collapsing the correlated variables into a single variable.