

Answers to Even-Numbered Exercises (Instructors Only)

Applied Multivariate Statistical Concepts, 1e
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Chapter 1

Answers to Conceptual Problems

1. d—structural equation modeling allows the examination of relationships or prediction with multiple dependent variables
2. a—logistic regression allows the examination of one categorical dependent variable
3. c—multiple linear regression provides for examining a continuous outcome
4. b—MANOVA is used when there are multiple outcomes with the goal of determining mean differences
5. c—multilevel linear modeling is used to analyze relationships of units nested within groups (e.g., children within preschool)
6. a—cluster analysis is a statistical technique for developing profiles of units (e.g., people)
7. d—confirmatory factor analysis allows for grouping of constructs when there is strong theoretical evidence to support the relationships between variables
8. b—discriminant analysis is a technique to predict group membership
9. d—propensity score matching allows units to be matched; which the matched groups can then be used for later inferential analyses
10. c—MANOVA is a test of mean differences, applicable when there are two or more dependent variables

Chapter 2

Answers to Conceptual Problems

1. c—see definition