Try again once you are ready
Grade received 75%
To pass 80% or higher
Try again

1. Which statistical technique better isolates the relationship between a single categorical variable of interest and the Y variable? 1 / 1 point

- ○ Multivariate analysis of covariance (MANCOVA)
- ○ One-way ANOVA
- ◉ Analysis of covariance (ANCOVA)
- ○ Multivariate analysis of variance (MANOVA)

✓ Correct
Analysis of covariance (ANCOVA) better isolates the relationship between a single categorical variable of interest and the Y variable. By taking the covariate into account, the ANCOVA technique allows data professionals to draw more accurate conclusions about the relationships among variables.

2. Which of the following statements accurately describe ANCOVA and linear regression? Select all that apply. 0.25 / 1 point

- ☐ Linear regression helps predict the Y variable for unrecognized data.
- ☑ Linear regression focuses on a continuous Y variable

✗ This should not be selected
ANCOVA includes covariates to gain a more clear understanding of the categorical variable. Linear regression helps predict the Y variable for unrecognized data.

- ☑ ANCOVA allows for continuous and categorical independent variables

✗ This should not be selected
ANCOVA includes covariates to gain a more clear understanding of the categorical variable. Linear regression helps predict the Y variable for unrecognized data.

- ☑ ANCOVA includes covariates to gain a more clear understanding of the categorical variable.

✓ Correct
ANCOVA includes covariates to gain a more clear understanding of the categorical variable. Linear regression helps predict the Y variable for unrecognized data.

3. What is the key difference between MANCOVA and MANOVA? 1 / 1 point

- ○ MANCOVA includes a null hypothesis.
- ◉ MANCOVA controls for covariates.

- MANOVA includes a categorical variable.
- MANOVA has two or more continuous variables.

Correct
The key difference between MANCOVA and MANOVA is that MANCOVA controls for covariates. If a data professional is only interested in one categorical variable and they want to control for another variable, they can use MANCOVA.