

Question



Which statistic is used to test the null hypothesis that all regression slopes are zero, against the alternative hypothesis that they are not all zero?

- ☒ a. F test in the ANOVA table.
- ☐ b. F test in the Regression table.
- ☐ c. Global t test in the parameter estimates table.
- ☐ d. R square
- ☐ e. Adjusted R square

Check My Answer

Correct.

The F test in the ANOVA table tests the global hypothesis for the model. F tests in the Type I and Type III tables, as well as the t tests in the parameter estimates table only test individual effects. The R-square and Adjusted R-square are measures of model fit.

Question



How can you recognize an interaction? Select all that apply.

- ☒ a. The effect of one variable differs at different levels of another.
- ☐ b. The joint effect of two variables is greater than the sum of their individual effects.
- ☒ c. A plot of the effect of one variable against the dependent variable shows different patterns across different levels of the other.
- ☐ d. One variable shows statistical significance without the other in the model, but no significance with the other variable in the model.

Check My Answer

Correct.

You can recognize an interaction by comparing the effect of one variable on the response at different levels of another using group means, or plotting the means to investigate different effect patterns on the response for a variable at different levels of another.