

1. Write a general linear model for the following tests. Use Y for response variable, X1 (and X2 if necessary) for nominal scale (classification) variables, and Z for ratio scale (regression) variables.

One-way ANOVA _____

Multiple regression _____

2. Complete an ANOVA table for a regression where the F-ratio is 6, the MSerror is 2, and there were 8 observations of the response variable.

3. Review question 21 (page 339) from Rosner (1995). Write a general linear model to examine whether arterial plasma epinephrine concentrations (nanograms per milliliter) in 10 laboratory animals varies with type of anesthesia (A, B, or C). All 3 types were applied to each animal, in random order. Be sure to assign a name and symbol to all response and explanatory variables