

## Introduction

In an earlier lesson about ANOVA, you learned to use the LSMEANS statement in PROC GLM to compute least squares means for one or more predictor variables (or effects). Remember that, unlike the arithmetic means, least squares means are adjusted for other effects in the model. You also learned to specify options in the LSMEANS statement to perform multiple comparisons on interactions.

You can use the LSMEANS statement to compute least squares means for ANCOVA as well, to adjust for a covariate (a continuous predictor variable). And, just as you can in ANOVA, you can specify options in the LSMEANS statement to perform multiple comparison tests in order to determine which group means are different. In ANCOVA, you compare group means at a specific value of the continuous predictor variable (that is, the covariate). By default, SAS compares the group means at the mean value of the covariate. In this section, you learn to compare group means at values other than the mean of the covariate by specifying options in the LSMEANS statement.