

# Extending the A Priori Procedure to One-Way Analysis of Variance Under Normality

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**Abstract:** The a priori procedure (APP) was designed as a pre-data procedure whereby researchers could find the sample sizes necessary to ensure that sample statistics to be obtained are within particular distances of corresponding population parameters with known probabilities. Researchers specify desired precisions (distances of sample statistics from corresponding population parameters) and desired confidences (probabilities of being within desired distances), and the APP provides necessary sample sizes to meet precision and confidence specifications. Although the APP has been devised for a variety of experimental paradigms, these have all been simple. The present article constitutes the extension of the APP to ANOVA paradigms. A fortunate side effect of the equations to be proposed is an improvement in efficiency even for a paradigm that fits a previously published APP article.