

ABSTRACT

The derivation and application of Fieller's theorem for use in constructing confidence intervals about a ratio was part of a course in Linear Models at Kansas State University and a course in Regression at George Mason University. Both schools used SAS for their computations.

The computations involved with construction of a confidence interval about a ratio are quite tedious. The macros written enable the computation of the confidence intervals to be carried out in a straight forward manner for any type of problem involving ratio of normal random variables. A check is included to determine when an appropriate confidence interval exists. Thus, the macros are extremely useful and are provided in a set of very compact code.

The enclosed macros written in SAS compute a $(1-\alpha) \times 100\%$ confidence interval for such estimators.