

# Inverse Complimentary Matrix Method and its Applications to General Linear Model

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## Abstract

In this presentation, we revisit the concept of ‘Inverse Complimented Matrix Method’ introduced by Eagambram (2018) and obtain new applications of Inverse Complimented Matrix Method. Some of well known generalized inverses and outer inverses of given matrix are characterized by identifying appropriate compliment. Also, we exhibit that the method helps to decompose the matrices  $V$  and  $X$  in the general linear model  $(Y, X\beta, \sigma^2V)$  and provide a representation of the model. An explicit expression for Admissible Linear Estimator of an estimable  $A\beta$  is also obtained by this method.

## Keywords

generalized inverse, shorted matrix, general linear model

## References

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