

Introduction to matrix algebra in R

Two tutorials are described below. The first tutorial provides an introduction to using R to perform matrix operations, reviewing concepts of multivariate inheritance along the way. The second tutorial will help you think about how selection on one trait can affect the mean of a correlated trait.

Tutorial 1. Matrix Algebra Session.- This exercise parallels the discussion of basic operations in matrix algebra given in Appendix 1 (from Arnold 1994). Notice that the sequence in the Session is the same as in the Appendix. You may want to keep the Appendix open so that you can see how R is doing the computations.

In RStudio, open `Matrix_algebra_session.Rmd`. If you find the Rmd document unfamiliar, watch this brief [video](#).

Tutorial 2. On Direct and Indirect Selection.- In RStudio, open `Tutorial_on_direct_and_indirect_selection.Rmd`. This exercise is self-contained. There is no companion document, but you may want to consult Lecture 2.2.