Exam 1 Study Guide
MATH 166 - Spring 2023
Tufts University, Department of Mathematics
Instructor: James M. Murphy

- **Review of Probability Theory**: densities, cdfs, concentration inequalities, (weak) law of large numbers, central limit theorem

- **Properties of Estimators**: mean squared error, bias, variance, consistency

- **Parametric Point Estimation**: parametric models, method of moments, maximum likelihood estimation

The exam will consist of three questions (each with multiple parts) and will last for 75 minutes. It is closed book— no books, notes, or other any other outside resources are permitted. It is recommended to study the homework first, then the class notes, then the textbook.