

Math 4/516 Midterm Exam 2 Review Material
Closed book exam, no calculators allowed.

Coverage: Sections 8.1-2, 9.1-6.

1. Terminology, Facts - Know formulas, be able to use: sample mean, sample variance, confidence interval, antithetic variates, monotone function, control variate, conditioning, stratified sampling, importance sampling, tilted density.
2. Methods - Be able to describe and apply to problems: determination of $100(1 - \alpha)$ percent confidence intervals, determination of sample size for stopping sampling, antithetic variates, control variates, stratified sampling, conditioning, importance sampling.