

CSE 312 – Section 10 Solutions

Spring 2026

Announcements

- You can find information about the final including locations, material that will be covered, the cheatsheet, etc [here](#).

Section plan

We will cover a selection of problems from past finals, in addition to any problems students wish to see covered.

- [Final from Winter 2024](#) (and solutions)
- [Final from Winter 2023](#) (and solutions)
- [Final from Spring 2014](#) (and solutions)

Problems to cover in case students did not raise any:

- 2023 Task 1b : Counting and conditional probability.
- 2023 Task 2 : Continuous RVs.
- 2023 Task 5 : Indicator Rvs.
- 2024 Task 3 : Exponential distribution + CLT.
- 2023 Task 4 : Law of total expectation.
- 2023 Task 7: A relatively challenging task.

Material not covered that you may find on practice tests

The following topics that you may find on practice tests will not be covered on the exam since either we did not cover them sufficiently this quarter or you did not have homework problems on those topics.

- Tail bounds (e.g. Markov's inequality, Chebychev's inequality, etc)
- Conditional distributions (we were not explicit about defining these).
- Markov chains

For your future benefit

The following additional reading will help you prepare for your more advanced courses.

From the [Alex Tsun book](#)

- Section 4.4 - Transforming continuous r.v.s
- Section 5.3 - Conditional Distributions
- Section 5.4 - Covariance and Correlation
- Section 5.7 - Limit Theorems
- Section 5.9 - The Multivariate Normal distribution
- Chapter 6 - Concentration inequalities
- Chapter 8 - Statistical Inference

From the [Harchol-Balter book](#)

- Chapter 5: Variance, high moments, and random sums
- Chapter 9: Normal distribution
- Part V: Statistical Inference
- Part VI: Tail Bounds and Applications

And reviewing all of the [Berkeley notes](#) is highly worthwhile!