

## Mathematics 1550H – Probability I: Introduction to Probability

TRENT UNIVERSITY, Summer 2023 (S62)

### Suggested Homework Problems

The problems suggested below are from the textbook, *Introduction to Probability* (2nd Edition), by C.M. Grinstead and J. Laurie Snell, American Mathematical Society, 2003. Available for free at: [www.math.dartmouth.edu/~prob/prob/prob.pdf](http://www.math.dartmouth.edu/~prob/prob/prob.pdf) There is also a copy on Blackboard. Various additional resources for this text can be found at: [www.dartmouth.edu/~chance/teaching\\_aids/books\\_articles/probability\\_book/book.html](http://www.dartmouth.edu/~chance/teaching_aids/books_articles/probability_book/book.html)

We will mostly follow the text, but will not cover certain parts of it, including Sections 1.1, 2.1, and 3.3 in the early going. Please note that we will cover §3.1 and §3.2 before going back to do §2.2. The suggestions below will be added to as we progress through the material. Feel free to do more problems (or even fewer :- ) as necessary to understand the material and ask about any of them if you have any questions.

§1.2 Exercises 1, 2bce, 3bce, 4ac, 5ac, 6, 7, 8, 9, 11, 13, 14, 18, 19, 20, 24

§3.1 Exercises 1, 3, 6, 7, 10, 11, 15, 17

§3.2 Exercises 1acfg, 2, 6, 8, 9, 10, 12, 15, 16, 18\*, 20, 22, 23, 26

§2.2 Exercises 1, 3, 4, 5, 6, 8adh, 15

§4.1 Exercises 1, 2abc, 3ab, 4b, 5a, 8, 9, 14, 17

§4.2 Exercises 1abc, 2bc, 3c, 5b, 7

§4.3 Exercise 1

§5.1 Exercises 1, 2, 3, 4ac, 5, 7, 8

§5.2 Exercises 1, 2, 5, 7, 12ab, 13ab, 22

§6.1 Exercises 1, 4, 5, 6, 13, 18

§6.2 Exercises 1, 2, 4, 9, 11, 12

§6.3 Exercises 1abc, 2ac, 3, 6, 8, 9ab

§7.1 Exercises 1, 3, 5

§7.2 Exercises 3acd, 5a, 19

§8.1 Exercises 1, 5, 11

§8.2 Exercises 1, 2, 3, 5, 8

§9.1 Exercises 1, 3

§9.2 Exercises 1, 3, 7

§9.3 Exercises 1, 4

Additional problems you can practice on can be found on the quizzes, assignments, tests, and exams, many with solutions, from previous iterations of this course taught by your instructor. See the archive page at: <http://euclid.trentu.ca/math/sb/1550H/>

---

\* The three persons mentioned in §3.2 Exercise 18 were all mathematics professors at Dartmouth College with one of the book's authors, J. Laurie Snell. James Baumgartner was your instructor's Ph.D. supervisor.