## Mathematics 1550H - Introduction to probability

TRENT UNIVERSITY, Summer 2014

## Homework

The following exercises from the text<sup>\*</sup> are for practice – they are not to be handed in and do not count for credit – and you should do them as we go through the material. (Get ahead if you like, just don't fall behind if you can avoid it.) Feel free to do as many more exercises besides those suggested below as you can stand, and by all means ask about any examples, problems, or exercises from the text in tutorial or office hours if you encounter any difficulties with them. Note that the answers to most odd-numbered exercises are given in the back of the text.

You will get updated versions of this list, adding problems for additional chapters, as we go through the material. Please note that Chapter 1 has no exercises. Give it a read anyway!

- §2.2 Exercises 2.5, 2.7, 2.9, 2.13
- §2.3 Exercises 2.17, 2.21, 2.23, 2.27, 2.29
- §2.4 Exercises 2.35, 2.37, 2.43, 2.45, 2.51, 2.55, 2.60, 2.65
- §2.5 Exercises 2.67, 2.71

Explain why the information given in 2.69 is insufficient to answer the question. Chapter 2 Supplementary Exercises 2.73, 2.77, 2.81, 2.83, 2.89, 2.91

- §3.1 Exercises 3.1, 3.5, 3.7, 3.11, 3.13, 3.19, 3.21
- §3.2 Exercises 3.23, 3.25, 3.29, 3.33, 3.37, 3.39
- §3.3 Exercises 3.43, 3.51, 3.52
- $\S3.4$  Exercises 3.55
- Chapter 3 Supplementary Exercises 3.65, 3.69, 3.73, 3.76

§4.1 Exercises 4.1, 4.5, 4.11, 4.13
§4.2 Exercises 4.19, 4.23, 4.25, 4.27, 4.33, 4.42
§4.4 Exercises 4.43, 4.49, 4.52, 4.53
§4.6 Exercises 4.65, 4.67, 4.69, 4.70, 4.75, 4.76, 4.81, 4.82
§4.7 Exercises 4.89, 4.93, 4.99, 4.103
§4.8 Exercises 4.109, 4.111, 4.117

Chapter 4 Supplementary Exercises 4.149, 4.153, 4.157

§5.1 Exercises 5.1, 5.3, 5.5, 5.7, 5.11

- §5.2 Exercises 5.13, 5.15, 5.19, 5.21, 5.25
- §5.3 Exercises 5.27, 5.31, 5.37, 6.39
- §5.4 Exercises 5.41, 5.43, 5.45, 5.49, 5.55, 5.63
- §5.5 Exercises 5.65, 5.66, 5.67, 5.69, 5.75
- §5.6 Exercises 5.77, 5.79, 5.81, 5.83, 5.85, 5.87, 5.95, 5.99
- §5.7 Exercises 5.105, 5.115
- §5.8 Exercises 5.119, 5.121

§5.12 Exercises 5.147, 5.149

Chapter 5 Supplementary Exercises 5.153, 5.155, 5.161, 5.179

<sup>\*</sup> Introduction to Probability and Its Applications (3rd Edition), by R.L. Scheaffer and L.J. Young, Brooks-Cole, 2009, ISBN-10: 0-534-38671-7, ISBN-13: 978-534-38671-9.

§6.1 Exercises 6.1, 6.3, 6.5, 6.8, 6.9, 6.13, 6.15
§6.3 Exercises 6.19, 6.21, 6.22, 6.23, 6.27
§6.4 Exercises 6.31, 6.33, 6.35, 6.37, 6.41
§6.5 Exercises 6.49, 6.51, 6.58
§6.6 Exercises 6.61, 6.66
Chapter 6 Supplementary Exercises 6.75, 6.77, 6.81, 6.82, 6.97

§7.2 Exercises 7.1, 7.3, 7.4

 $\S8.3$  Exercises 8.1, 8.3, 8.6

§8.4 Exercises 8.11, 8.13, 8.19, 8.29