BOOK OF PROOF EXERCISES

Charles Kelley

1   Purpose

I am studying the BOOK OF PROOF as preparation for the mathematical portion of Machine Learning studies that I have based on the Carnegie Mellon Machine Learning masters program. Specifically, this is part of my effort to prepare for studying materials covered in the '36-700 Probability & Mathematical Statistics or 36-705 Intermediate Statistics' course requirement.

After completing this survey in forming mathematical proofs, I will begin studying probability, mathematical stattistics and calculus as they comprise the bulk of the mathematical underpinnings of machine learning.

2 Exercises 1.1

A. Write each of the following sets by listing their elements between braces.

1. $\{5x - 1 : x \epsilon Z\} = \{..., -16, -11, -6, 4, 9, 14, ...\}$ 2.