A Minimal Book Example

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Chapter 1

Prerequisites

This is a *sample* book written in **Markdown**. You can use anything that Pandoc's Markdown supports, e.g., a math equation $a^2 + b^2 = c^2$.

The **bookdown** package can be installed from CRAN or Github:

```r
install.packages("bookdown")
# or the development version
# devtools::install_github("rstudio/bookdown")
```

Remember each Rmd file contains one and only one chapter, and a chapter is defined by the first-level heading `#`.

To compile this example to PDF, you need XeLaTeX. You are recommended to install TinyTeX (which includes XeLaTeX): https://yihui.org/tinytex/.

Chapter 2

Introduction

No exercises in this chapter.

Chapter 3

The Lasso for Linear Models

3.1 Exercise 2.1

We need to show that

$$\lambda_{\max} = \max_j |\frac{1}{N} \langle x_j, y_j \rangle|$$

is the smallest λ such that all coefficients are zero.