Asheville School R Intro

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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:

```
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

Getting Started with R

We will have to install a few things before we get started using R to help us understand math and statistics.

2.1 1. Install R

Download and install the most recent version of R. Install R. If you are running the most updated version of OSX you should be fine to select the first download file, version 3.6.2.

2.2 2. Install RStudio

RStudion is the most popular integrated development environment (IDE) for R. Download RStudio. Again, if you are running the most updated version of OSX you should be fine to download the most recent version of RStudio.

That's it, now you are ready to follow along with the walkthrough.

Chapter 3

Walkthrough

3.1 What R you talking about?

R is a programming language that is popular among mathematicians, scientists, staticians, and many other professional careers that need to analyze and understand large amounts of data. R and Python are the two most popluar languages for working with data. If you plan on going into a STEM field or plan to do any research you will most likely need to have an understanding of how to program in one of these two languages. Now is a great time to learn how to analyze data programmitically.

3.2 Walkthrough

1. Open RStudio and open up a new R script by clicking on the  in the upper left and selecting R script. We will be doing most of our work in the script portion of the layout we can ignore the sections on the right side for now.