

STA 445 Assignment #5

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November 08, 2023

Due Date: Wednesday, November 15th, 2023 before 11:59 PM

All assignments must be submitted through Canvas.

Chapter 14 - Graphing (Again)

This chapter helps with some more details/nuances of graphing. This includes putting multiple plots together, adding annotation and text to graphs, using/graphing map and geographic information, as well as changing the color palettes we use to make our figures. I don't want to spend an overly large amount of time here, so we will work some of the basic questions and move on. Be sure to read the entire Chapter, there are a lot of significant details.

Reading Assignment

Please Read Chapter 14 of the textbook.

Exercises

Please complete the following Exercises from Chapter 14 Section 14.6:

Complete Exercises 1, 2

This assignment is meant to be a bit gentler and simplified after the rough exam. We will be picking up some advanced topics starting next week, where I hope to present details of using `GitHub` on Thursday 11/16/2023.

Question Notes:

Question 1: For the `infmtort` data set, the country names are the `rownames()` of the `data.frame`. You will need to make a new column within the `infmtort` `data.frame` for the countries, so that you can use `ggrepel` functions correctly.

Question 2: Please add to the graph the best fit line, and make the annotated information based on the `lm` fit information (coefficients and R-squared), rather than the random values provided.

Helpful Reminders

- All submissions must be PDFs generated directly from RMD (not .docx converted to .pdf).
- Please give a response to all sub-questions. Give a ‘final product’ for the final sub-question.
- Make sure ALL code is visible on the output document. You can hit ‘enter’ after any punctuation.
- Use the `head()` or `tail()` commands to reduce the output shown from large data sets.
- Knit often!