

Homework

Vibe check

Instructions

Please address each of the following questions or prompts with responses in a typed file, submitted to D2L as a pdf. A sentence or two for each should be sufficient, unless indicated otherwise.

You can use your locally-installed copy of R or RStudio or connect to RStudio on Buddy. Each approach has its advantages depending on your needs.

1. Describe a new idea, related to data visualization and exploration (DVE), that you have been alerted to so far this semester.
2. Describe something related to DVE that you are curious about or would like to learn more about throughout the remainder of the semester.
3. Download the R script from last class to your computer. You can work locally or upload this file and associated data to your account on Buddy. Verify that you were able to download and store the file and associated data to an appropriate location, or describe any challenges you faced.
4. Attempt to execute the code in the script. Indicate whether you were successful or describe key words from any error messages you could not get past.
5. The command `par()` can be used for a variety of modifications to the graphing window. Using `par(mfrow = c(2, 2))` opens a two by two graphing window. Adding a second argument `mar = c(5, 6, 1, 1)` allows you to set the graph *margins* in a clockwise direction `c(bottom, left, top, right)` as the number of writable lines (for axes ticks, labels, and text) on each side. Using a two by two layout, show all four milestones (“independent”, “home”, “child”, and “married”).
6. (Graduate students) After using `par(mfrow = c(2, 2))` use `par(mfrow = c(1, 1))` to return to a single window. Graph one milestone as before. Now, instead of separate plots, use `lines()` to add lines (or points and lines after specifying `type = "..."`) to show additional “milestones” to the same graph. Experiment with the use of color, symbols, or line styles. Running `?plot` and exploring the help file should give you ideas.
7. Review your graph(s) from problem 5 (and problem 6, for graduate students). Critique your graph. Are there changes you would like to make? If so describe what those changes are and your rationale for wanting to make those changes.

Submission

Submit a pdf file to D2L by the end of the day on Sunday, February 8, 2026. I recommend preparing this in whatever document format you are most comfortable with (e.g., Google Docs, Word, {}). Answer questions 1-4 and 7 in sentence form. Paste in graphs for question 5 (and 6, if appropriate) by any means necessary (e.g., saving files, pasting screenshot). However you create your file, save it as a pdf prior to submission. We will look at other, perhaps more convenient, approaches to document preparation very soon.