

Preliminaries in R

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What is R?

- ▶ A statistical programming language
- ▶ Open-source
- ▶ A core package with many available user-created add-ons (packages)

What is R?

Currently popular in a number of fields, including:

- ▶ Statistics
- ▶ Machine learning
- ▶ Data journalism / Data analysis

What is R?

“The best thing about R is that it was developed by statisticians.
The worst thing about R is that... it was developed by statisticians.

-Bo Cowgill, Google, at the Bay Area R Users Group

Gratis vs. libre

- ▶ Gratis: Free as in beer
- ▶ Libre: Free as in speech

With open-source software (free as in speech), you can:

- ▶ Check out the code to figure out how the software works
- ▶ Share the code (and software) with other people
- ▶ Make any changes you want to the code

What is RStudio?

RStudio is a user interface for R. You download it separately, but it's a “nicer” way to work in R.

RStudio (the company) currently:

- ▶ Develops and freely provides the RStudio IDE
- ▶ Provides excellent resources for learning and using R (cheatsheets,)
- ▶ Is producing some of the most-used R packages
- ▶ Employees some of the top people in R development

Setting up

If do not already have them, you will need to download and install both R and RStudio.

- ▶ Go to CRAN and download the latest version of R for your system. Install.
- ▶ Go to the RStudio download page and download the latest version of RStudio for your system. Install.
- ▶ Defaults should be fine for everything.