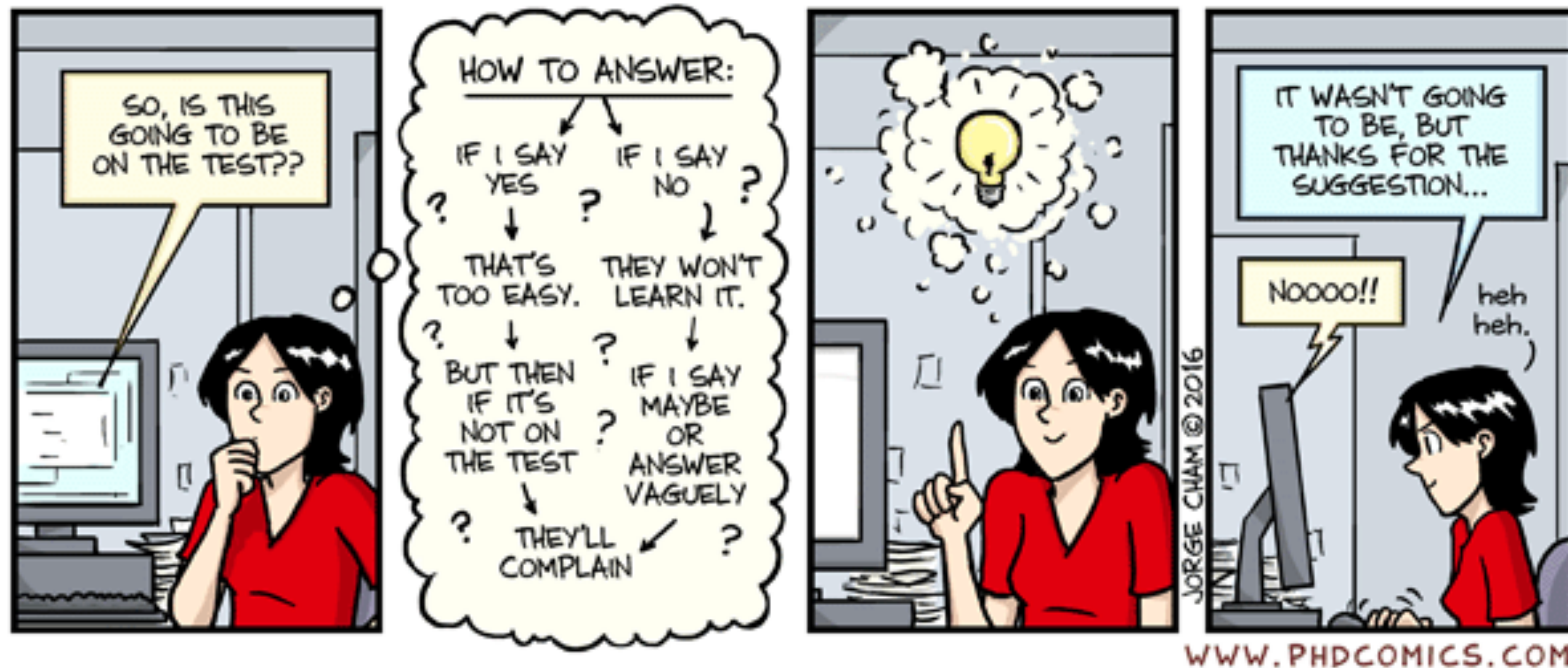# Midterm Review & Project Discussion

10.26.21

Midterm

- Thursday, October 28, 1:30-3:00 PM (Hughes Auditorium)

- Will cover L01-L09: intro, probability, sampling, hypothesis testing

- Will **NOT** be asked to write R code. **BUT** might be asked to explain R code — use homework and lectures for guidance

- You might be asked to perform calculations — bring calculator (cannot use your phone!)

- Types of questions will be similar to homework, but less computationally intensive.

  - Some math, but focused on the **concepts**

Resources

- R basics: https://github.com/katiesevans/IGP_biostatistics/blob/main/intro_R_basics.pdf

- R stats functions: https://github.com/katiesevans/IGP_biostatistics/blob/main/stats_R_cheatsheet.md

- Extra book problems: https://github.com/katiesevans/IGP_biostatistics/tree/main/extra_problems

- General stuff and more links to other resources: https://github.com/katiesevans/IGP_biostatistics

Final Project

- Choose a dataset (from rotation lab, previously published, random data from the internet…)

- Explore the data and come up with one or two research questions that can be answered with a statistical analysis we discussed in class

- Perform **at least two** statistical analyses (one per question or two tests for one question). Be sure to state hypotheses, assumptions, methods, results, and conclusions

- Assignment is three parts:
  - 1) Project proposal (1-2 paragraphs) **due Friday Nov. 12 @ 5pm**
  - 2) Rmarkdown report (code, figures, stats) **due Friday Dec. 10 @ 5pm**
  - 3) Written 1-2 page report **due Friday Dec. 10 @ 5pm**