

# Exercise: R Basics

## Day 1, Part A

1. Start a new R script for the answers to this exercise. Add a header with your name, the date, and a description of the code.
2. Load the `stats` and `ggplot2` packages (just for practice, we're not going to use these yet).
3. Use two different functions to find the base 2 logarithm of 512 (hint: see the help file for `log()`).
4. Consider the `round()` function.
  - a. Pull up the help file.
  - b. What does this function do?
  - c. What arguments does this function take?
  - d. Which (if any) arguments are required?
  - e. Which (if any) arguments have defaults? What are these defaults?
  - f. Round  $365/12$  to the nearest 10th, naming all arguments.
  - g. Round  $365/52$  to the nearest 100th, without naming any arguments.
5. Solve for x:  $3x^2 + 5x - 20 = 0$  (hint: [https://en.wikipedia.org/wiki/Quadratic\\_formula](https://en.wikipedia.org/wiki/Quadratic_formula)).