The answers to the following questions should be placed in a single document file or text file.

__Week 5 quiz is due end of day on Friday September 26th__. Solutions to all quiz exercises will be posted on Saturday September 27th. Your grade will be based on two randomly selected exercises.

Reading Quiz: "Tidy Data"

1. Data _____ is what Hadley Wickham calls structuring datasets to facilitate analysis.
2. In tidy data, there are three properties. One of these properties states that "each type of observational unit forms a table." What are the other two properties of tidy data.
3. According to Hadley Wickham, what are the five most common problems with messy datasets?
4. Provide a one sentence definition for each of the four fundamental verbs of data manipulation:
   a. Filter
   b. Transform
   c. Aggregate
   d. Sort
5. What is the function in base R used for filtering?

Reading Quiz: "Introduction to dplyr"

1. What are the advantages and disadvantages of using the dplyr package versus the plyr package?
2. What are the advantages and disadvantage of using plyr versus the base R apply family of functions?

Reading Quiz: "tidyr"

1. What are the two verbs (functions) in the tidyr package that correspond to the spreadsheet functions pivot and unpivot?