

# Assignment 12 Markdown

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## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com> (<http://rmarkdown.rstudio.com>).

## Narrative paragraph

This document represents example usage of the R Markdown feature. The purpose of it is to practice R Markdown authoring and document structure, embedding R code, narrative text, and LaTeX math in a single file. It will also include a thoughtful reflection regarding the workflow vs. writing plain reports.

## LaTeX math expression

Here I practiced using LaTeX math expressions both inline and on their own lines. For example:

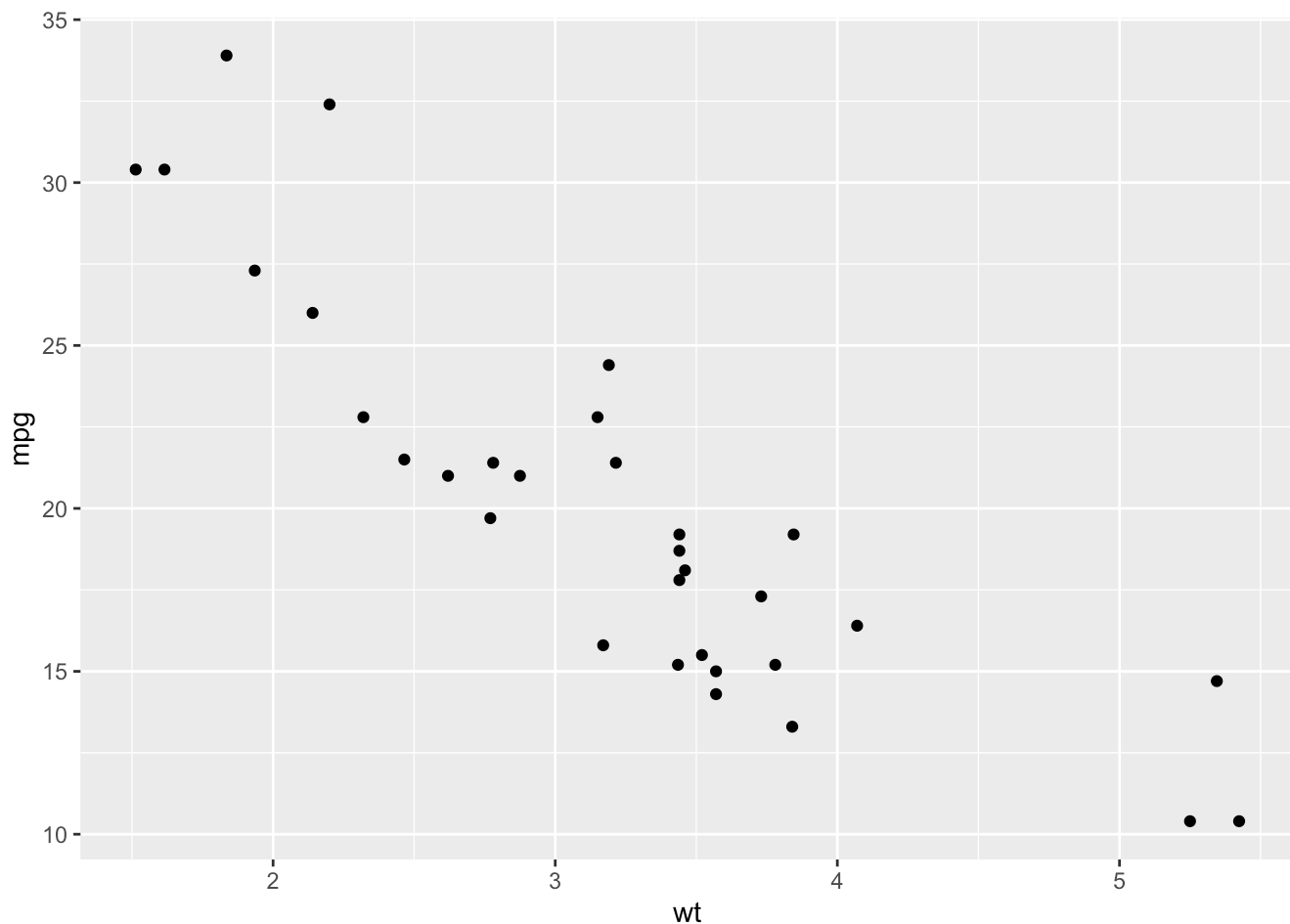
This is the inline equation for the Pythagorean theorem:  $a^2 + b^2 = c^2$ ,

And here is the same equation displayed on its own line:

$$a^2 + b^2 = c^2$$

## Executable R code chunks

Here I wrote simple R code chunks to load ggplot and create simple scatterplot using the built in mtcars dataset. The plot shows car weight (wt) vs miles per gallon (mpg).



## Reflection

R Markdown is a very useful format to generating a report. I like that you can easily embed plots or formulas without showing the code that was used to create them using the “echo=FALSE” line. Additionally, the section headers and narrative chunks are very easy to distinguish when writing the actual document. However, I would say that because there are both R code and narrative chunks, the process before knitting can look a bit overwhelming and may be a little difficult to keep track of. I found myself consistently editing, knitting, reviewing formatting, and then editing again since the rendered output does not exactly match what is written. That being said, I believe it provides a cleaner final report, but requires more work on the back-end.