Lab 2

Your Name Here

September 26, 2018

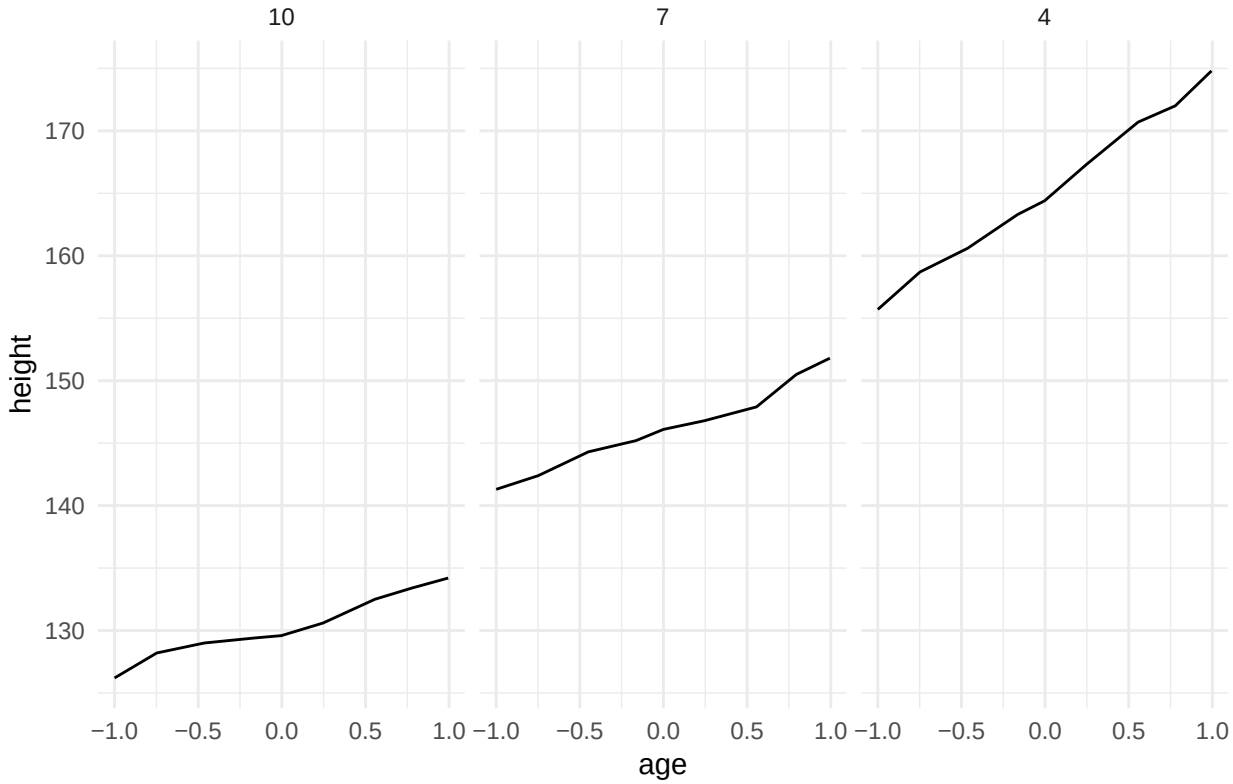
1. Run the following code to

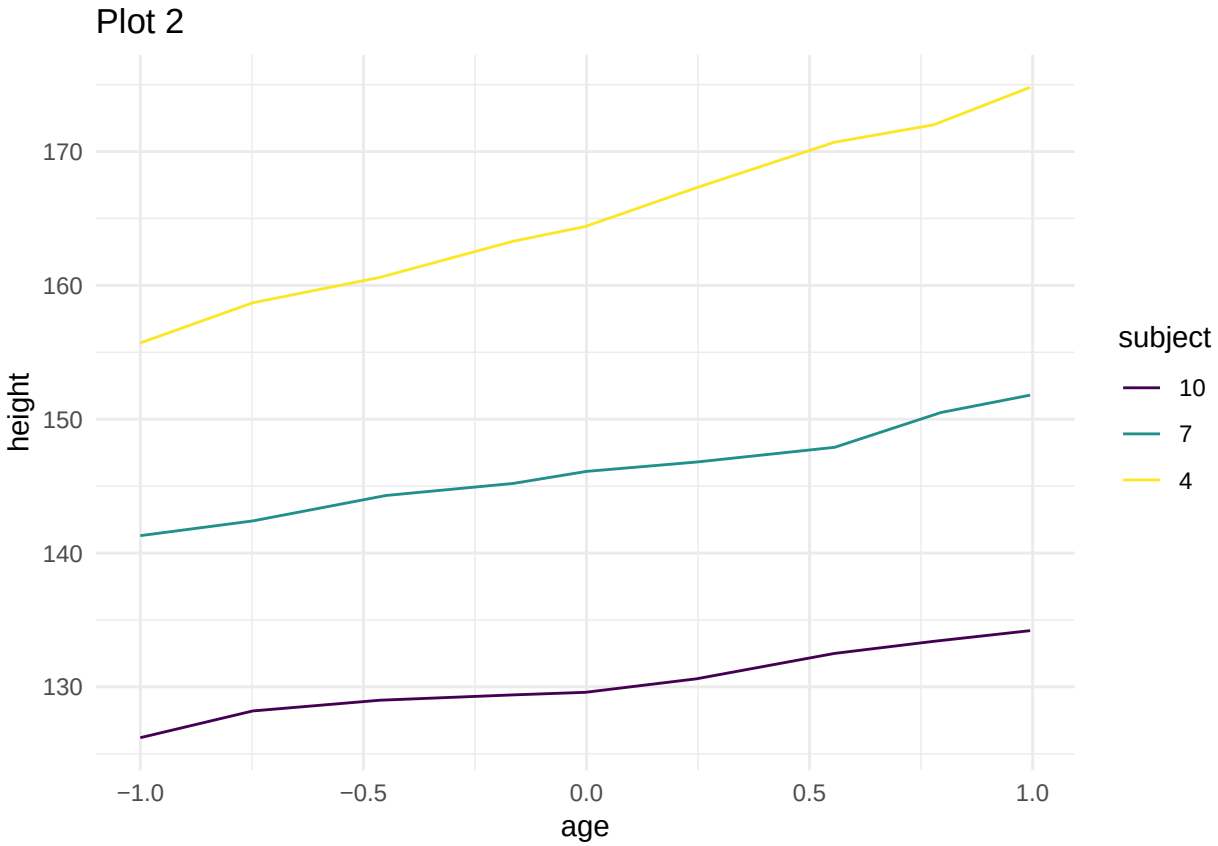
(a) download the *nlme* and package
(b) load the package
(c) save it in a new object as a `tibble`. This last step is obviously not required, but is helpful, from my view.

```
install.packages(c("nlme", "janitor"))
library(nlme)
library(janitor)
library(tidyverse)
pd <- Oxboys %>%
  clean_names() %>%
  mutate(subject = factor(subject),
         occasion = factor(occasion)) %>%
  filter(subject == "10" | subject == "4" | subject == "7") %>%
  tbl_df()
```

1. Reproduce the following plots, using the data. You can use whatever theme you want, but all else should be the same.

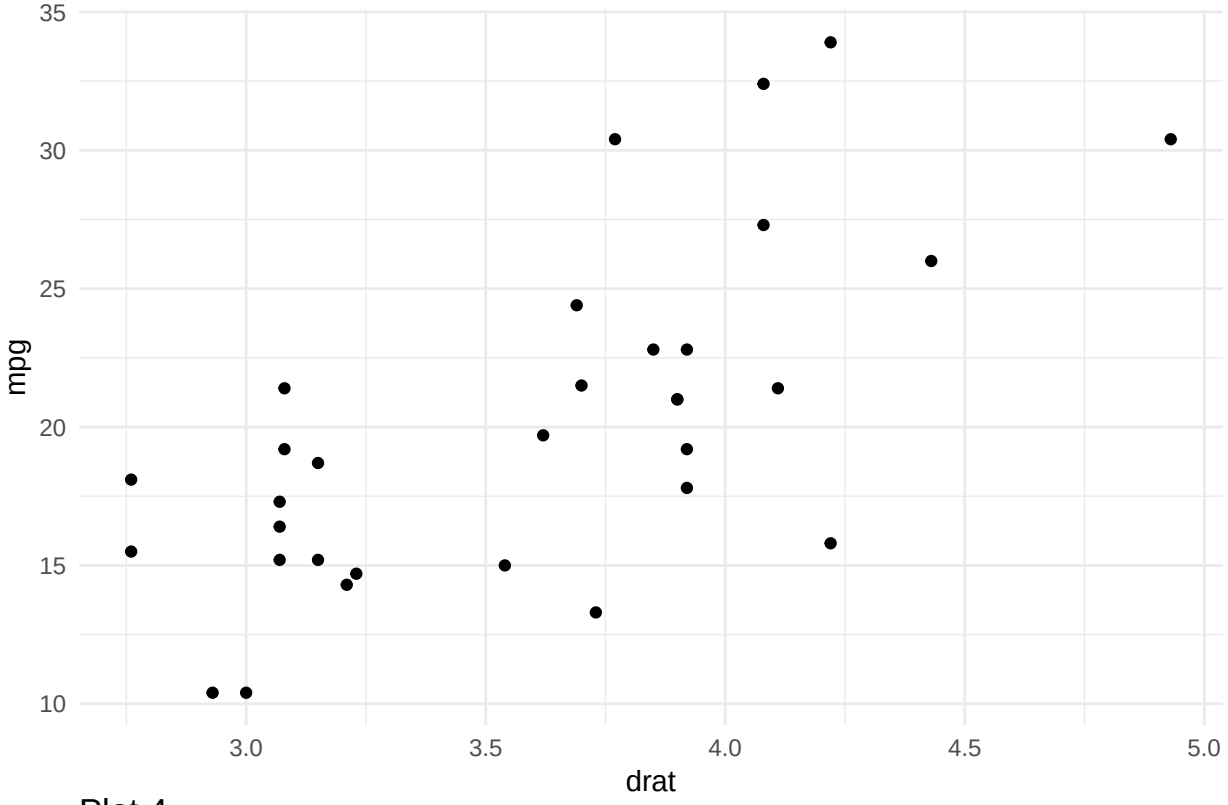
Plot 1



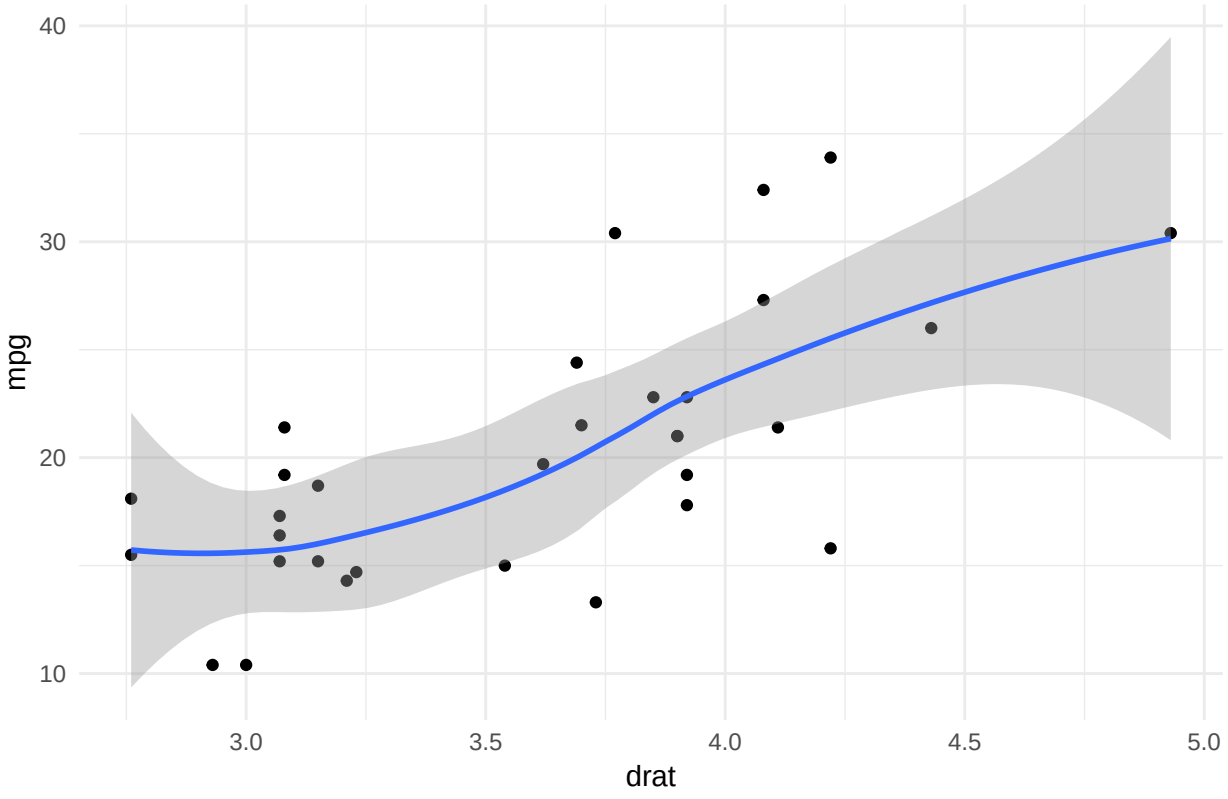


2. Use the *mtcars* dataset from base R to replicate the following plots. (just type *mtcars* into the console to see the dataset).

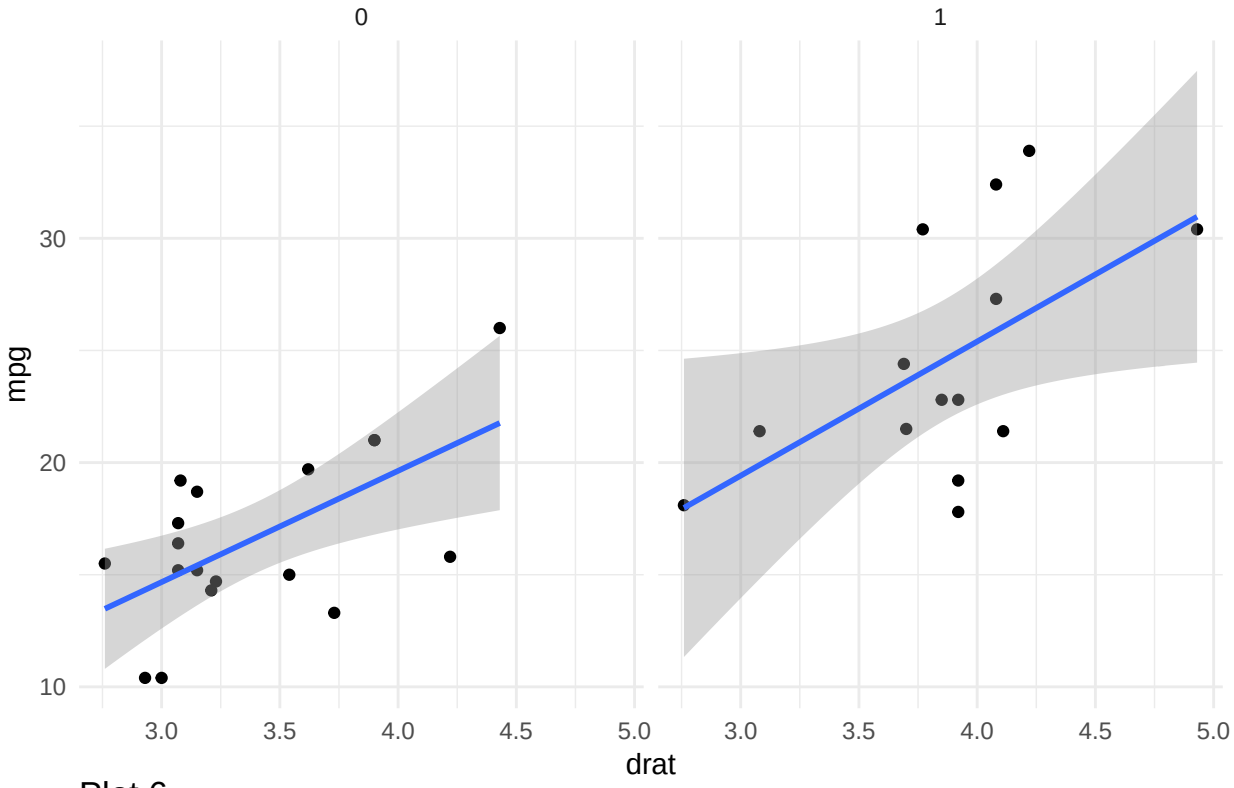
Plot 3


35
30
25
20
15
10
mpg
3.0
3.5
4.0
4.5
5.0
drat

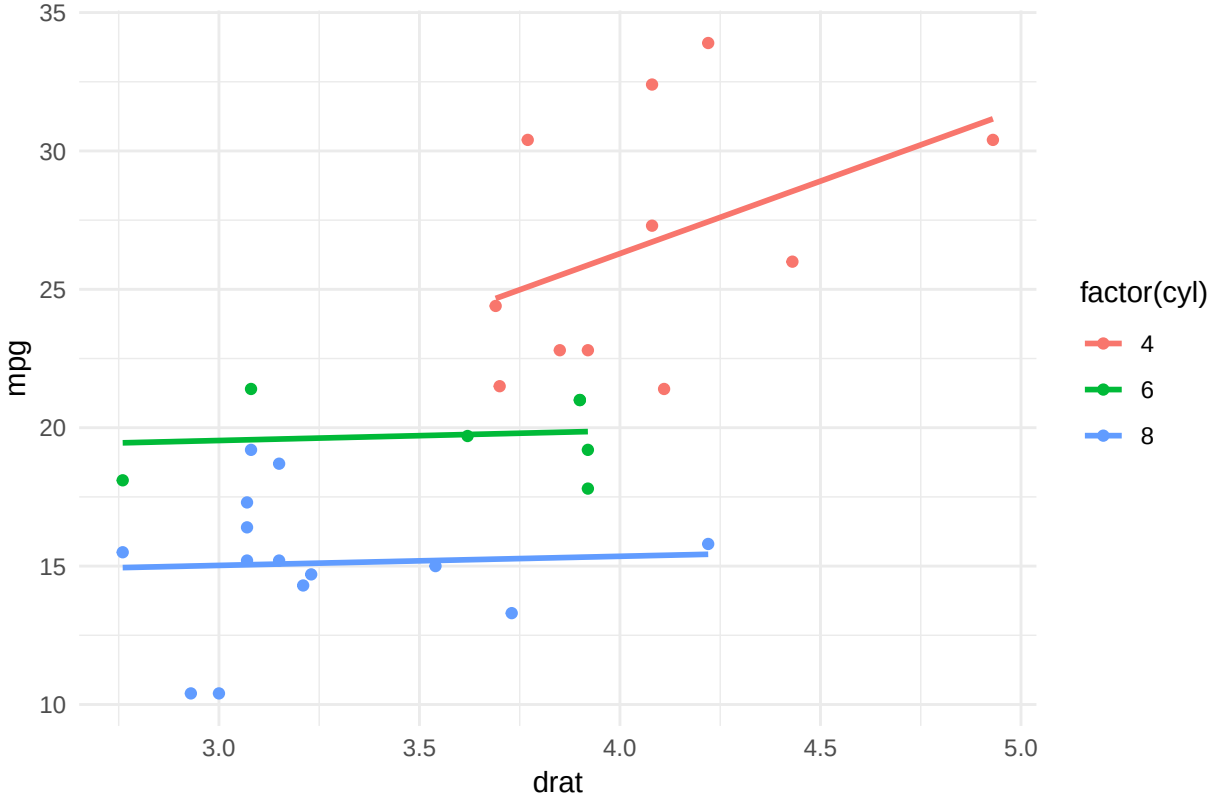
Plot 4


40
30
20
10
mpg
3.0
3.5
4.0
4.5
5.0
drat

Plot 5

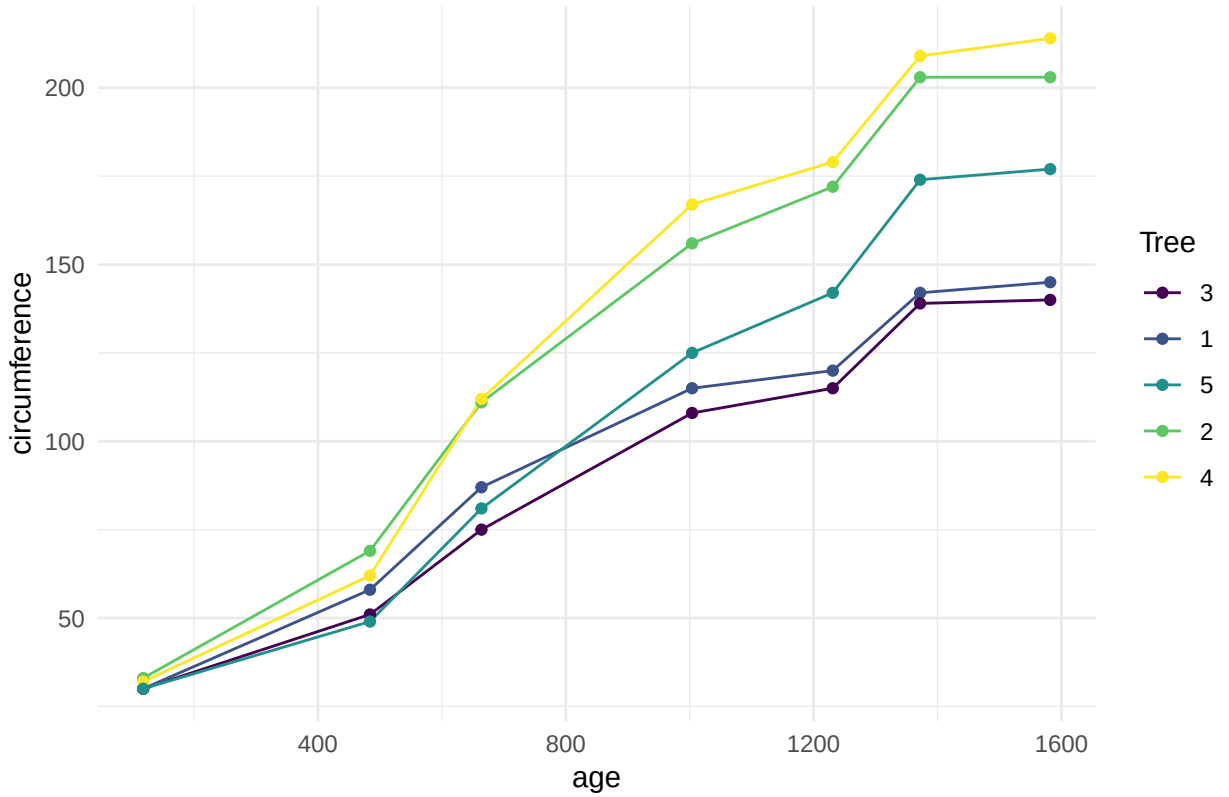


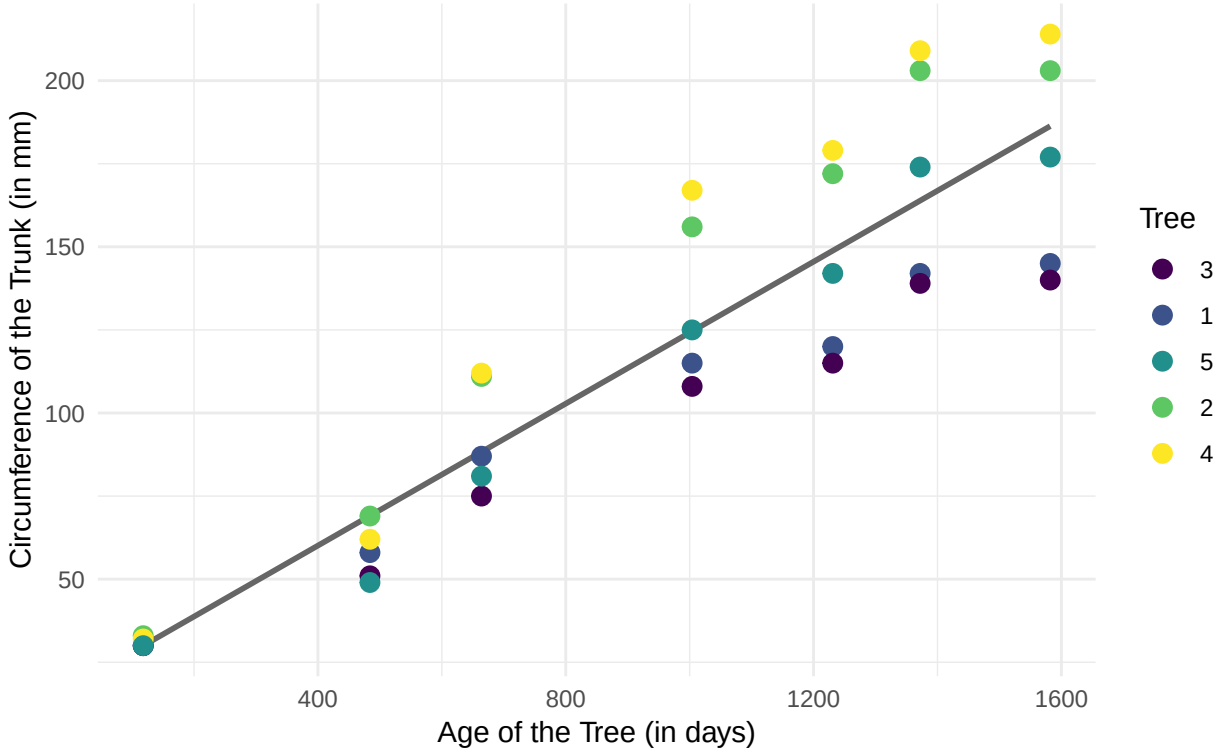
Plot 6



3. Use the *Orange* dataset, also part of base R, to replicate the following plots.

Plot 7



Orange Tree Growth

Gray line displays a linear model fit to the data.