

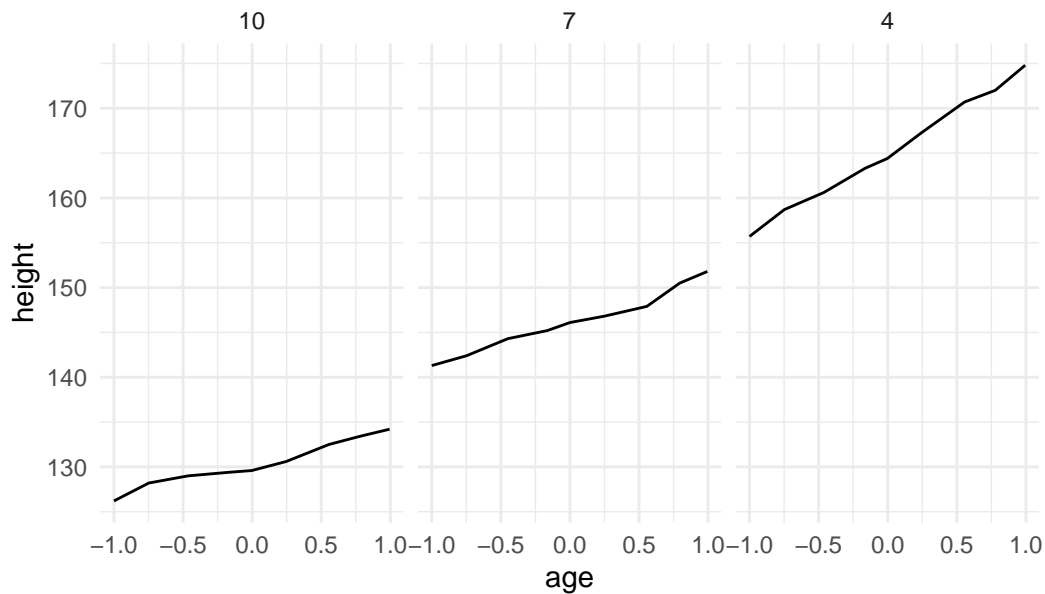
Homework 2

1. Install the `{nlme}` package
2. Load `{nlme}`, `{janitor}`, and the `{tidyverse}` packages in the “setup” chunk
3. Run the chunk below to prep some data from the `{nlme}` package for plotting

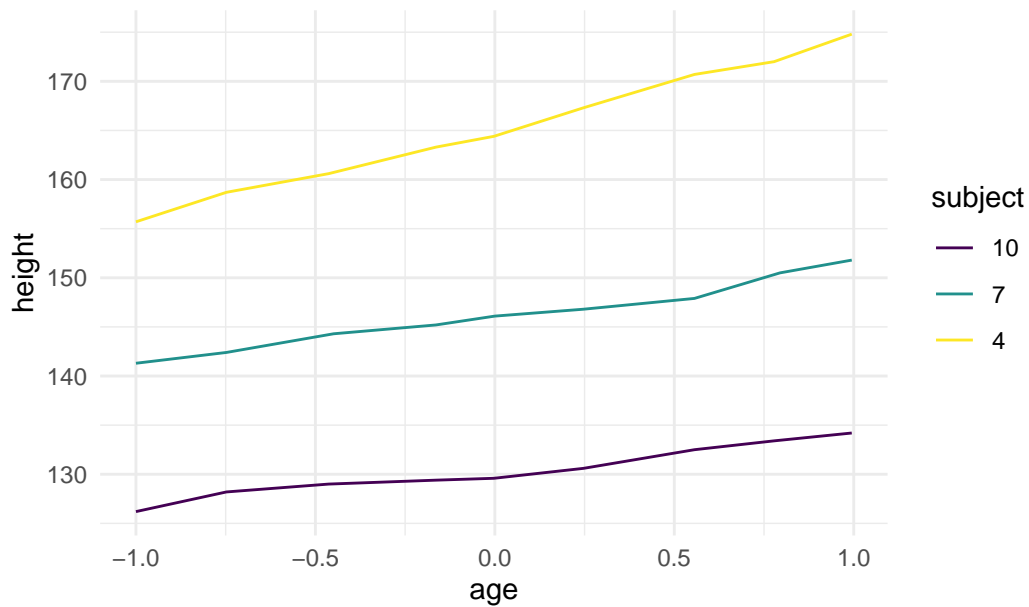
```
pd <- Oxborns %>%  
  clean_names() %>%  
  mutate(subject = factor(subject),  
         occasion = factor(occasion)) %>%  
  filter(subject == "10" | subject == "4" | subject == "7") %>%  
  as_tibble()
```

4. Reproduce the following two plots, using the *pd* data. You can use whatever theme you want (I used `theme_minimal()`), but all else should be the same. Note that Plot 1 is a line plot, not a “smooth.” Note that Plot 2 is a line plot also.

Plot 1

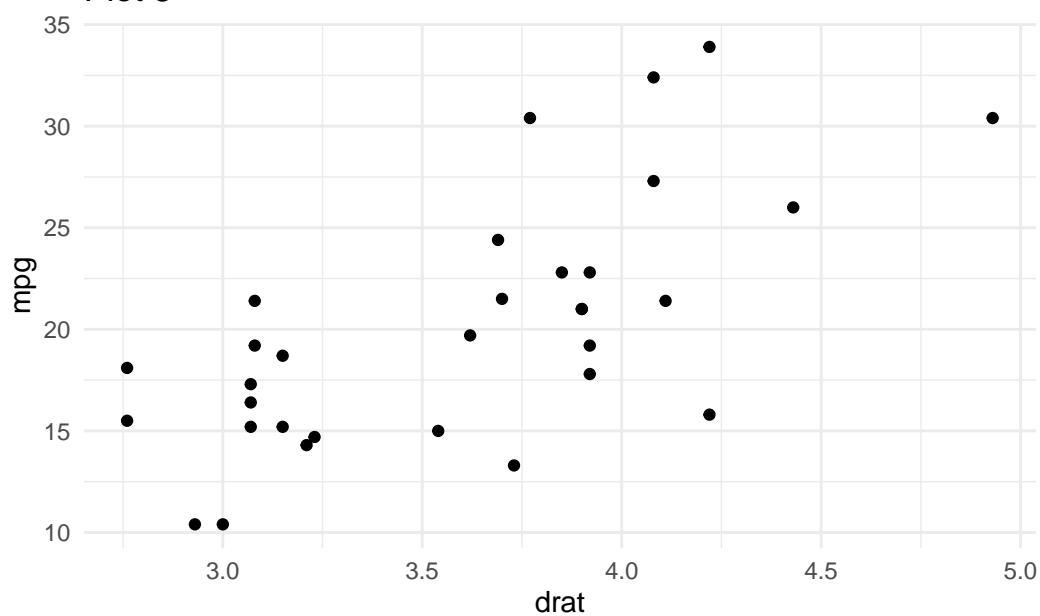


Plot 2

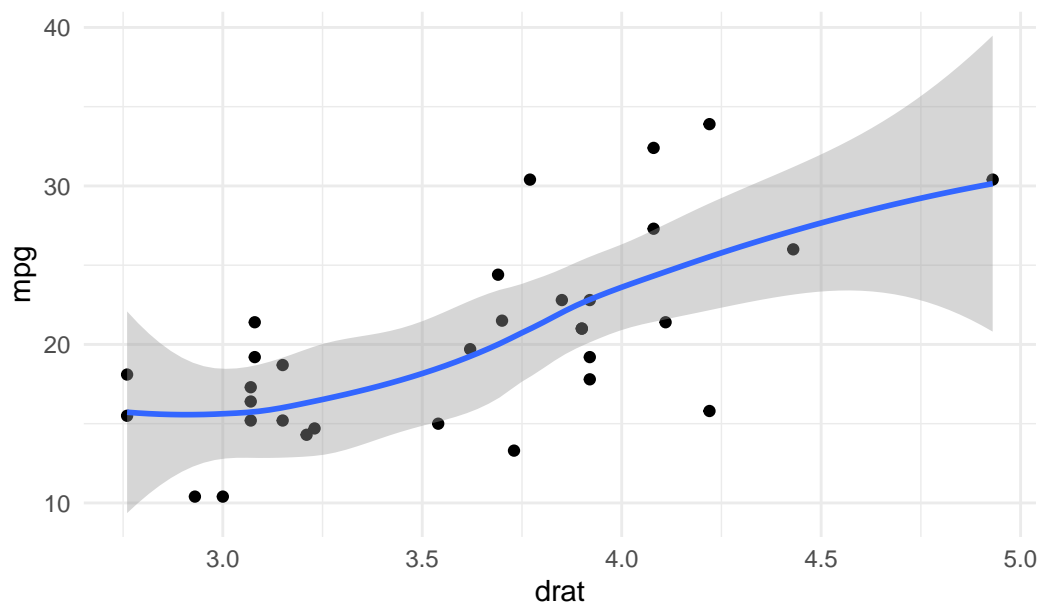


5. Use the *mtcars* dataset from base R to replicate the following plots. (Just type *mtcars* into the console to see the dataset).

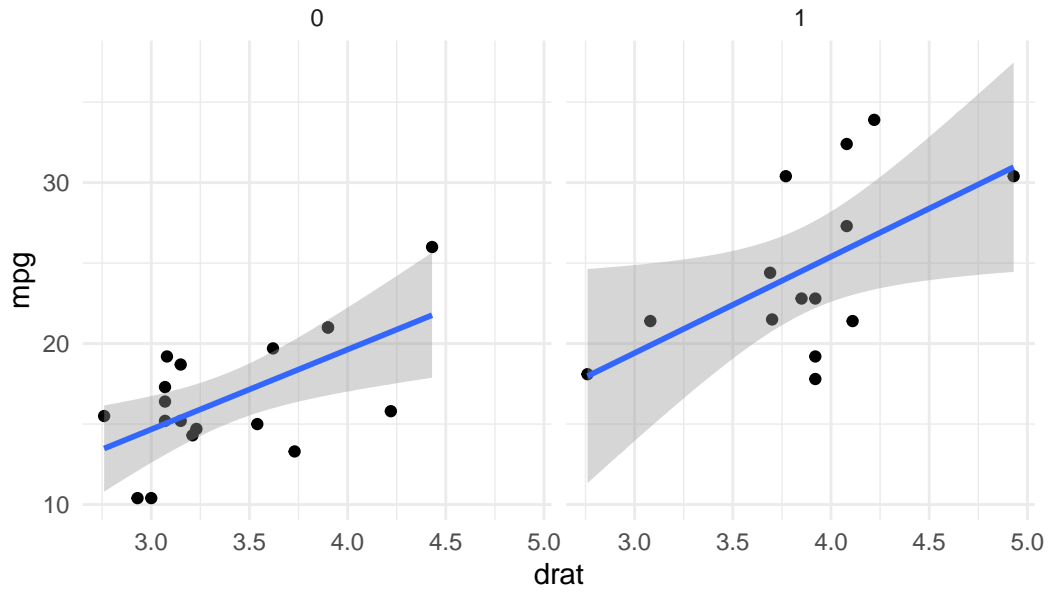
Plot 3



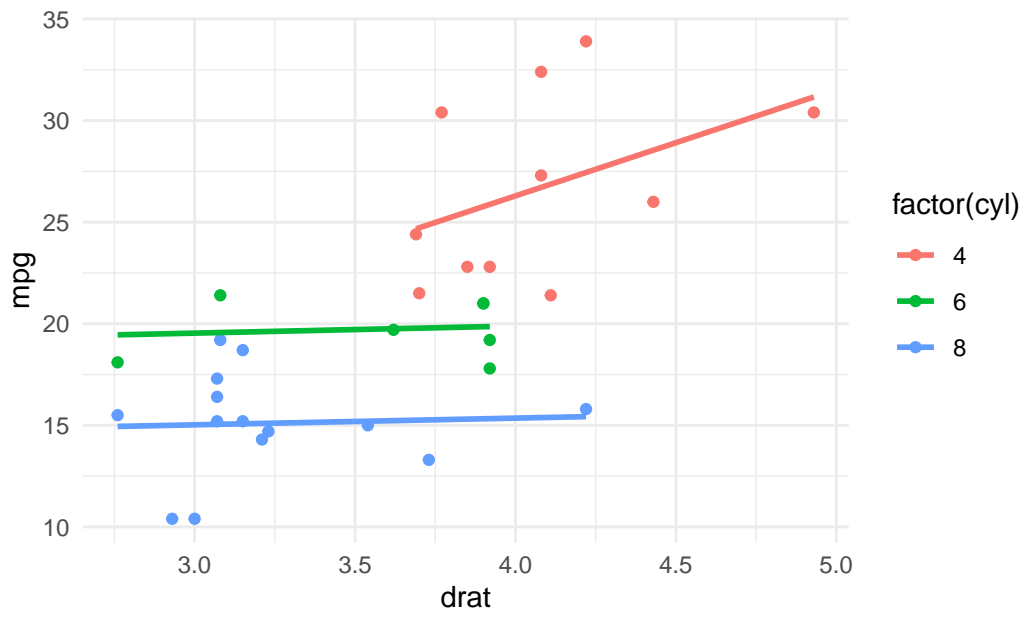
Plot 4



Plot 5

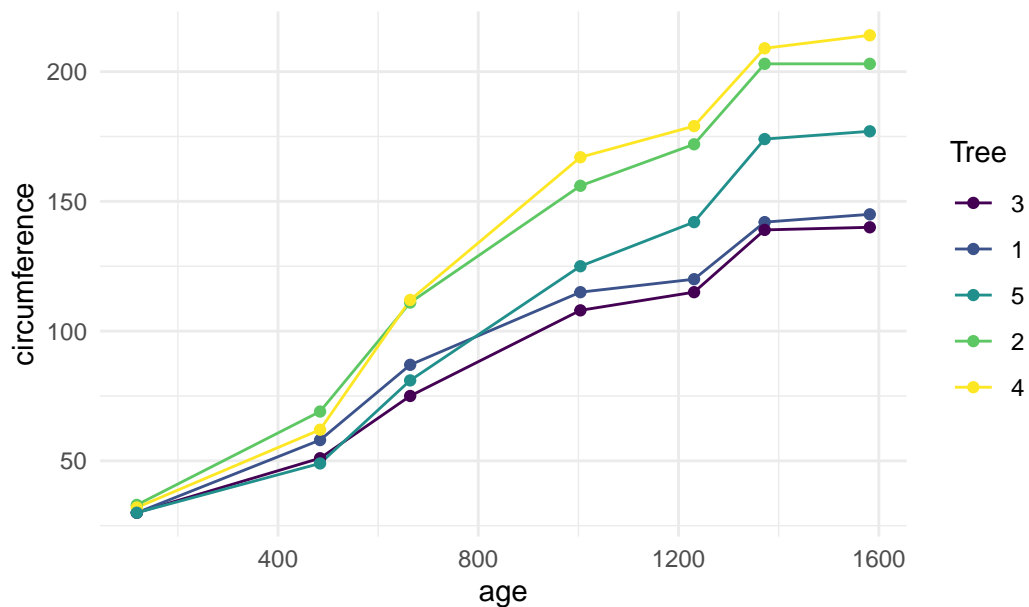


Plot 6



6. Use the *Orange* dataset, also part of base R, to replicate the following plots. See slides from the week 3 class for labels.

Plot 7



Orange Tree Growth

Gray line displays a linear model fit to the data.

