# Problem set 1

#### Jamie Esmond

```
library(tidyverse)

cars <- read_csv("data/cars.csv")</pre>
```

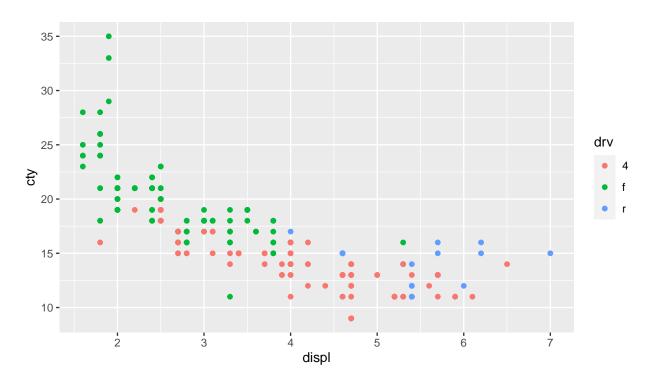
## Learning R

Tell me that you worked through the primers and videos and examples at the example page for this week: I worked through all the primers and it took a long time, but I learned a lot.

## My first plots

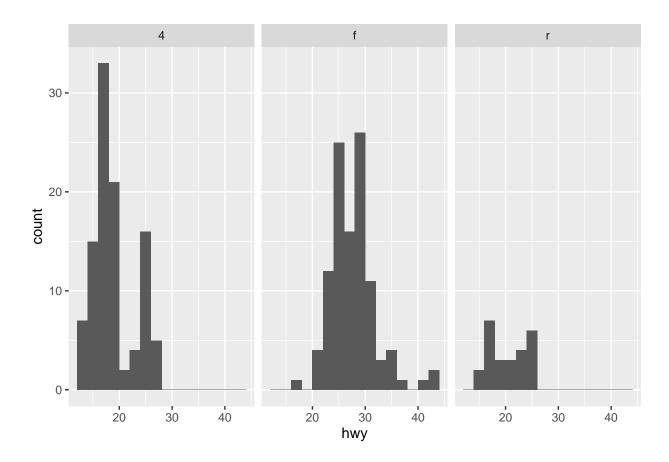
Insert a chunk below and use it to create a scatterplot (hint: geom\_point()) with displacement (displ) on the x-axis, city MPG (cty) on the y-axis, and with the points colored by drive (drv).

```
cars %>%
  ggplot() +
  geom_point(mapping = aes(displ, cty, color = drv))
```



Insert a chunk below and use it to create a histogram (hint: geom\_histogram()) with highway MPG (hwy) on the x-axis. Do not include anything on the y-axis (geom\_histogram() will do that automatically for you). Choose an appropriate bin width. If you're brave, facet by drive (drv).

```
cars %>%
  ggplot() +
  geom_histogram(mapping = aes(hwy), binwidth = 2, boundary = 0) +
  facet_grid( ~ drv)
```



#### My first data manipulation

Insert a chunk below and use it to calculate the average city MPG (cty) by class of car (class). This won't be a plot—it'll be a table. Hint: use a combination of group\_by() and summarize().

```
cars %>%
  group_by(class) %>%
  summarise(cty_class = round(mean(cty), 1)) %>%
  arrange(desc(cty_class))
```

```
## # A tibble: 7 x 2
   class cty_class
    <chr>
                  <dbl>
## 1 subcompact
                   20.4
## 2 compact
                   20.1
## 3 midsize
                   18.8
## 4 minivan
                   15.8
                   15.4
## 5 2seater
## 6 suv
                   13.5
## 7 pickup
                   13
```