WU #3 - Sums of Squares

Math 158 - Jo Hardin

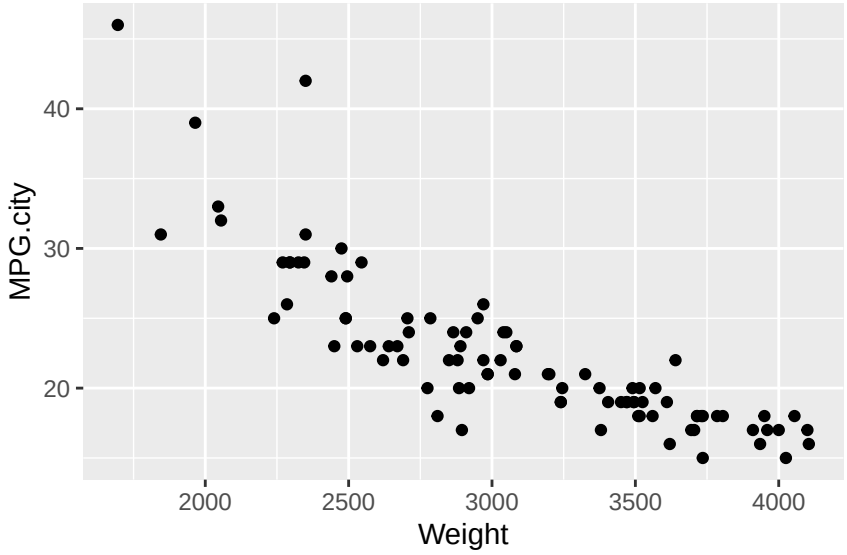
in class: Thursday 1/27/2022, due: Friday 1/28/2022

Name: _____

Names of people you worked with: _____

Consider the following ANOVA table. The data are based on a random sample of cars from among 1993 passenger car models that were listed in both *Consumer Reports* and the *PACE Buying Guide*. We are considering the variables `weight` and `MPG.city`.

```
Cars93 %>%
  ggplot(aes(y=MPG.city, x= Weight)) +
  geom_point()
```




```
Cars93 %>%
  lm(MPG.city ~ Weight, data = .) %>%
  anova() %>%
  tidy()
```

```
## # A tibble: 2 x 6
##   term         df sumsq  meansq statistic   p.value
##   <chr>     <int> <dbl>   <dbl>     <dbl>     <dbl>
## 1 Weight        1 2066. 2066.        224.  2.97e-26
## 2 Residuals    91  840.    9.23       NA  NA
```

1. Find R^2.
2. Interpret R^2.