3.3.1

What's gone wrong with this code? Why are the points not blue?

ggplot(data = mpg) +   geom_point(mapping = aes(x = displ, y = hwy, color = "blue"))

A: color must be nested outside of the aes cast, this is looking for a variable name

6. What happens if you map an aesthetic to something other than a variable name, like aes(colour = displ < 5)? Note, you'll also need to specify x and y.

A: It will create a new key based on that boolean statement as long as there is a proper paren grouping, ignoring paren groupings will cause an error. See Fig 1

FIG 1: the key generated by the boolean statement

3.5.1

2. What do the empty cells in plot with facet_grid(drv ~ cyl) mean? How do they relate to this plot?

ggplot(data = mpg) +
  geom_point(mapping = aes(x = drv, y = cyl))

A: The empty cells are for where there is no overlap between drv and cyl for instance there is no car that has 5 cylinders and 4 wheel drive

6. When using facet_grid() you should usually put the variable with more unique levels in the columns. Why?
This will generate a more spread out graph hence making it considerably easier to read