

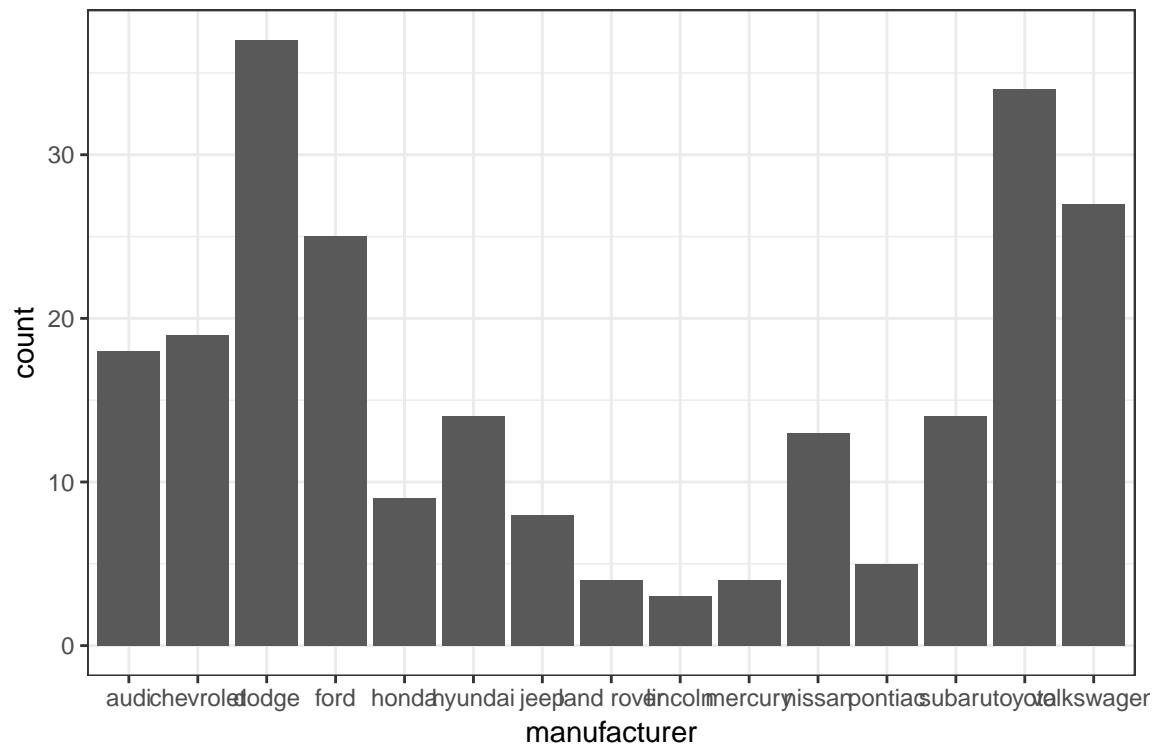
Load packages:

```
library(tidyverse)
theme_set(theme_bw()) # My prefered theme, feel free to choose other
```

## Exercise 1

### Part 1

First, make this plot:

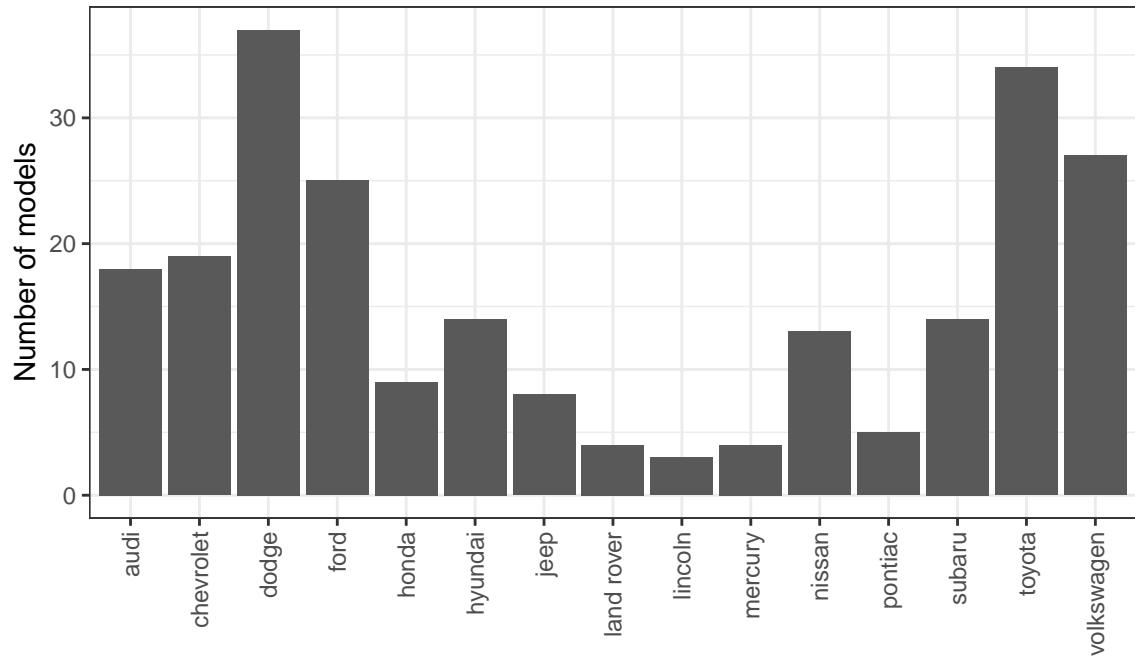


### Part 2

Now, make that plot a bit nicer, something like:

## Number of models for each manufacturer

Fuel economy data from 1999 and 2008

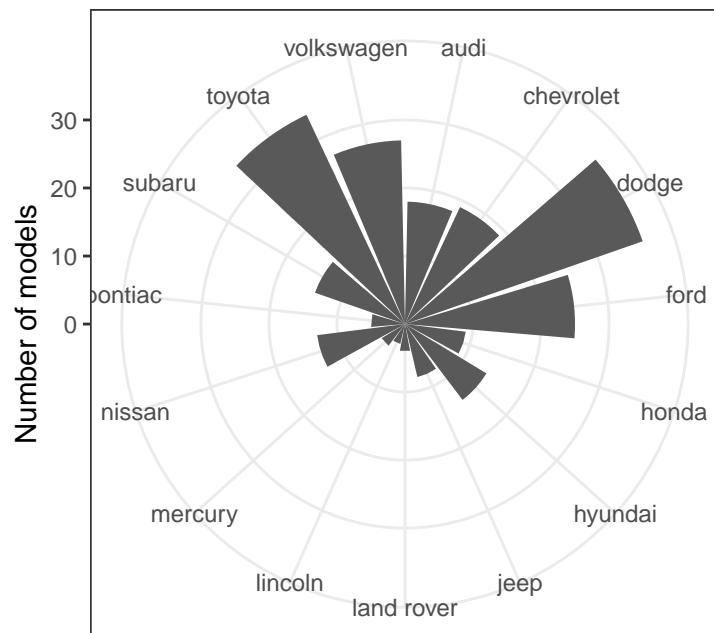


## Part 3

... or even in polar coordinates (hint: `coord_polar()`):

## Number of models for each manufacturer

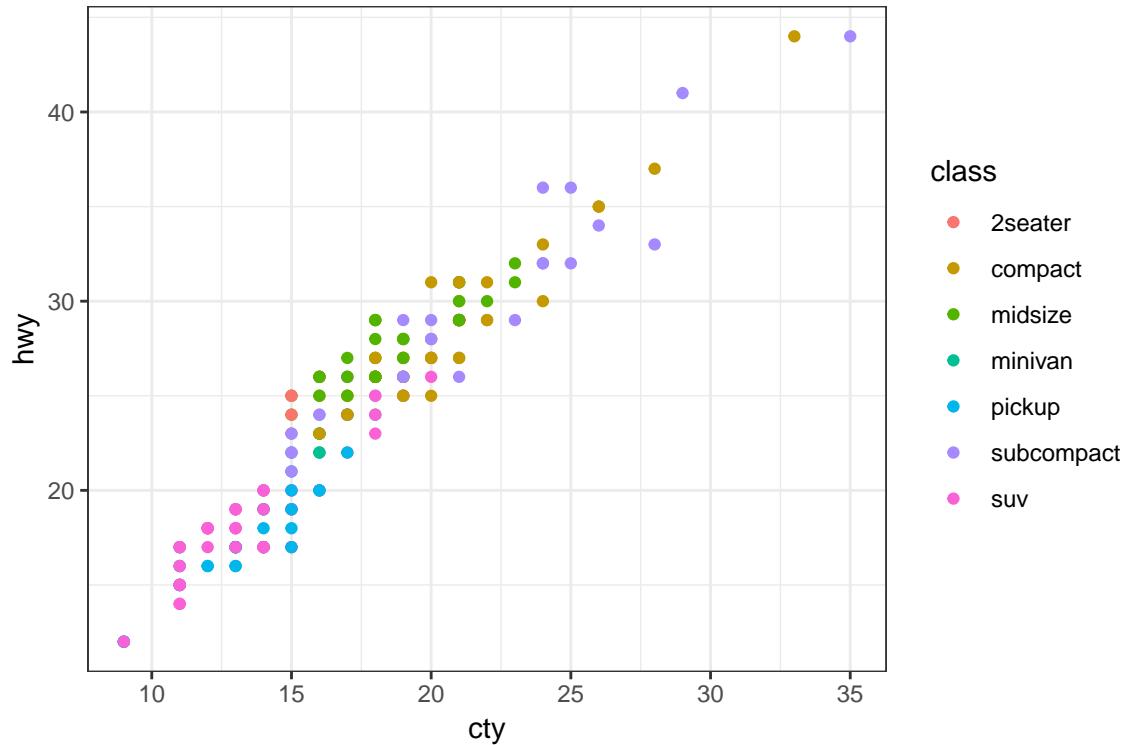
Fuel economy data from 1999 and 2008



## Exercise 2

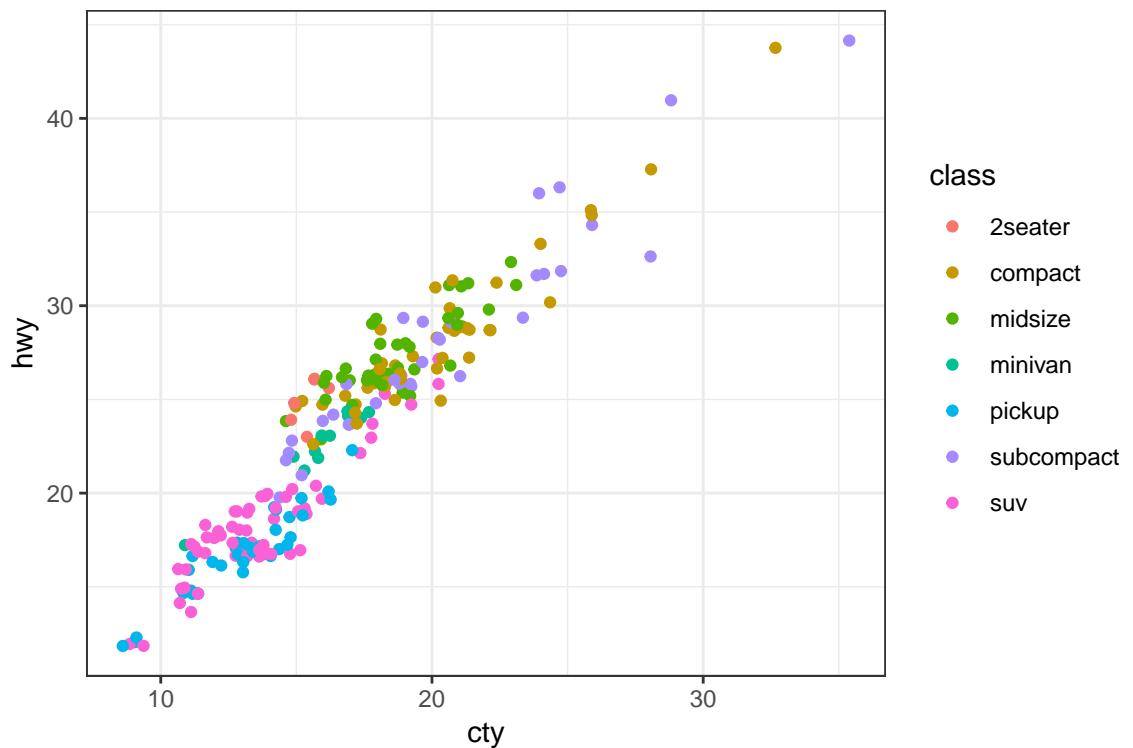
### Part 1

Make this plot:



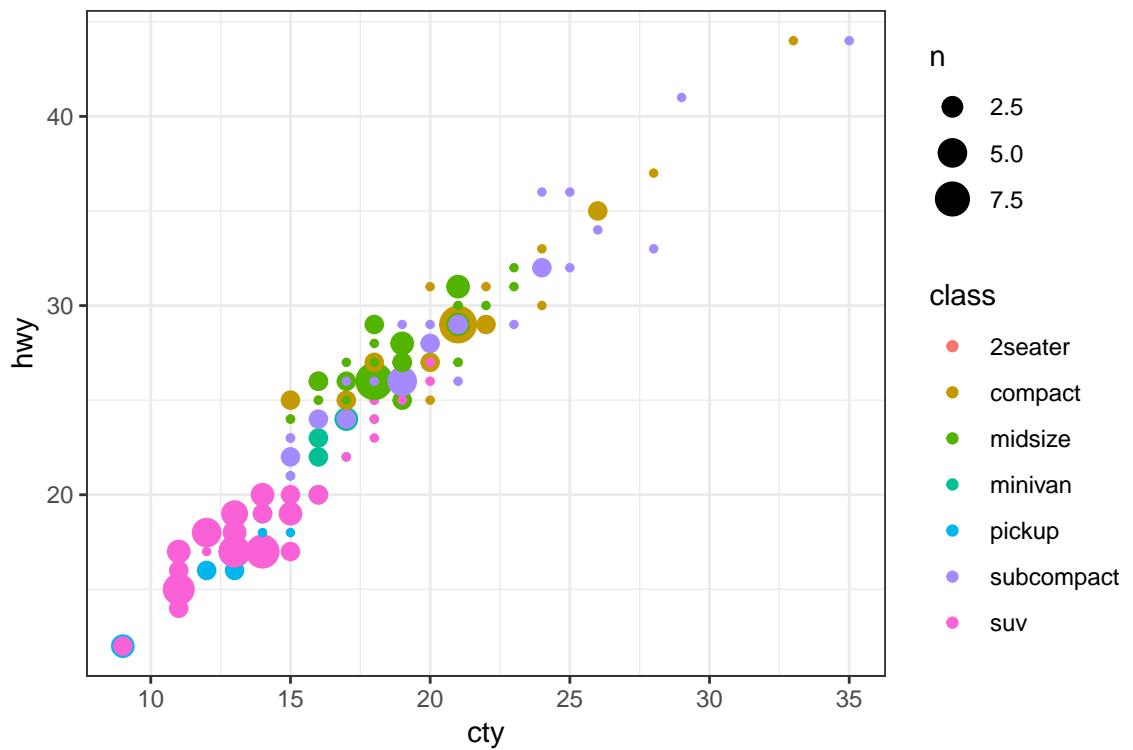
### Part 2

Make this plot using `geom_jitter()`:



### Part 3

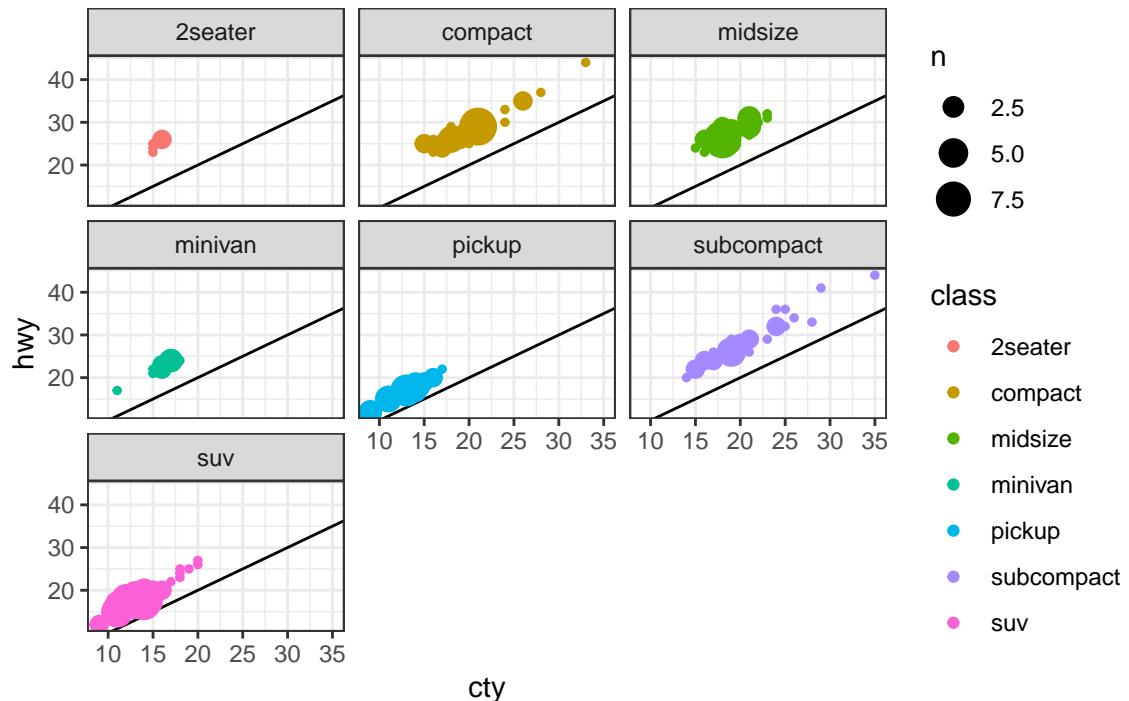
Make this plot using `geom_count()`:



## Part 4

Make this plot using `geom_count()`:

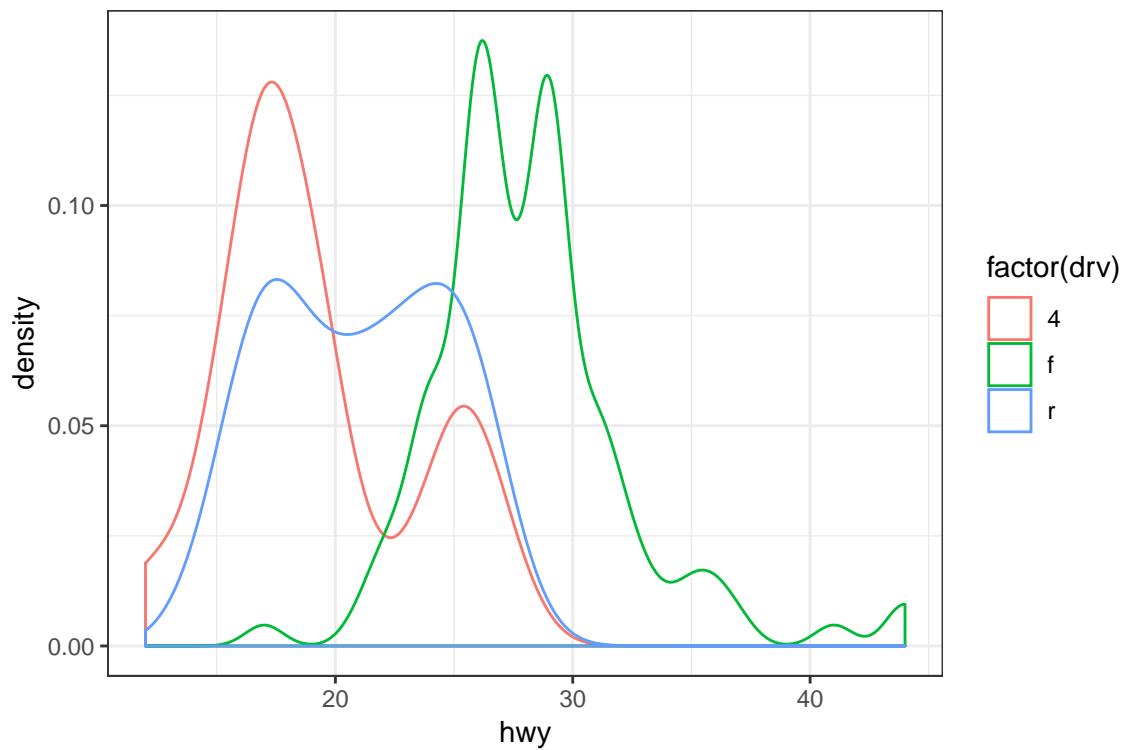
Solid line is the identity line,  $cty = hwy$



## Exercise 3

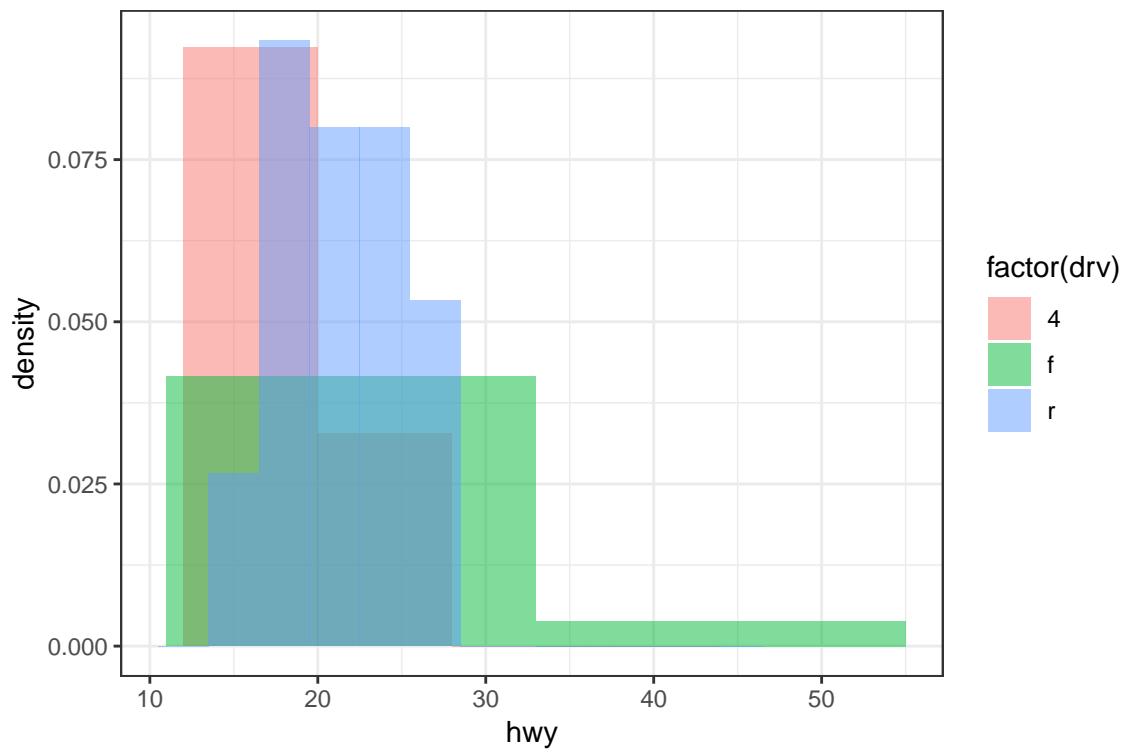
### Part 1

Make this plot using `geom_density()`:



## Part 2

Make this plot using `geom_histogram()`:



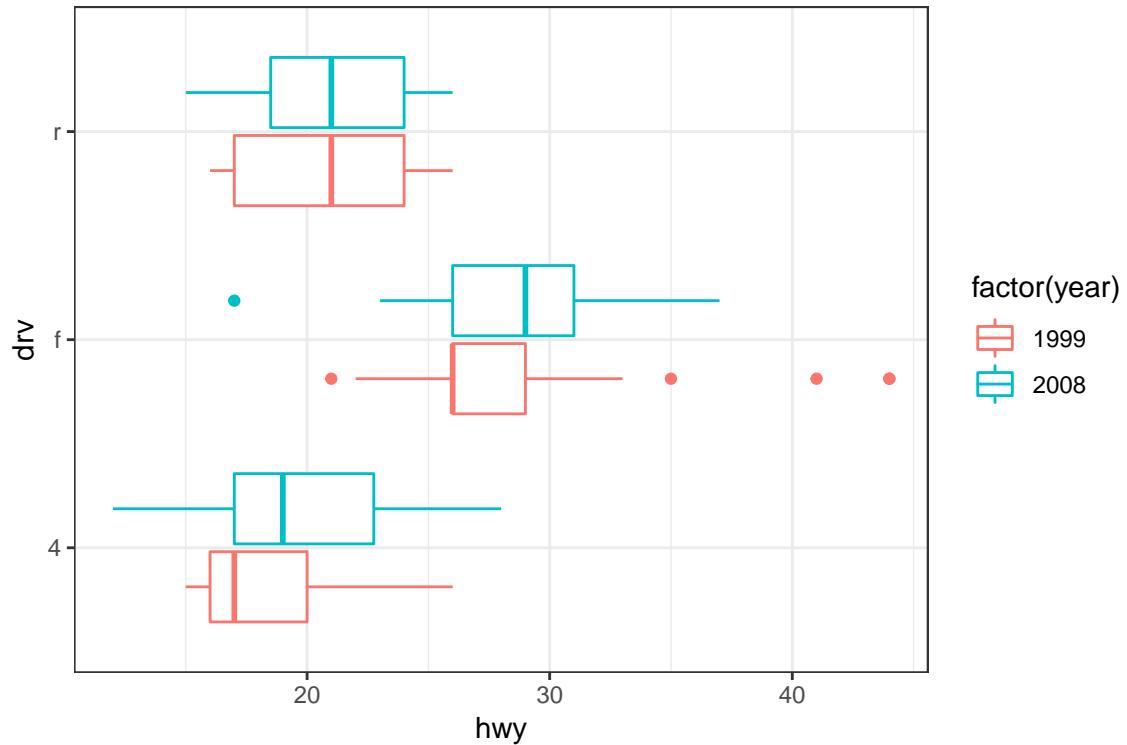
Hints:

- `y = stat(density)` / [https://ggplot2.tidyverse.org/reference/geom\\_histogram.html](https://ggplot2.tidyverse.org/reference/geom_histogram.html)
- `position = position_identity()`

## Exercise 4

### Part 1:

Make this plot:



Hint: `coord_flip()`.

### Part 2:

Now, customise it (including the legend/guide):

