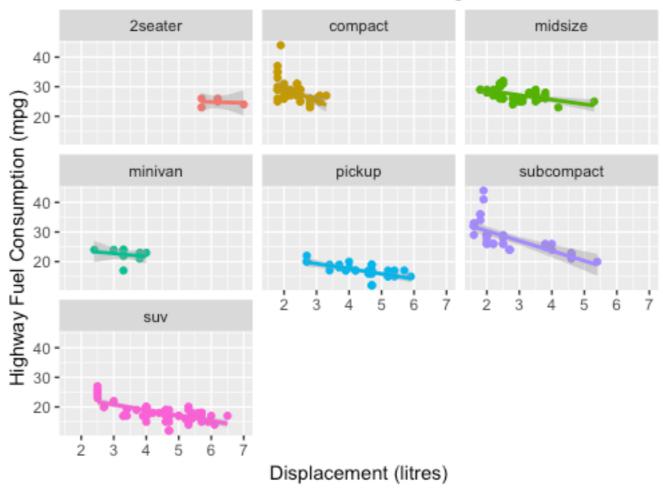
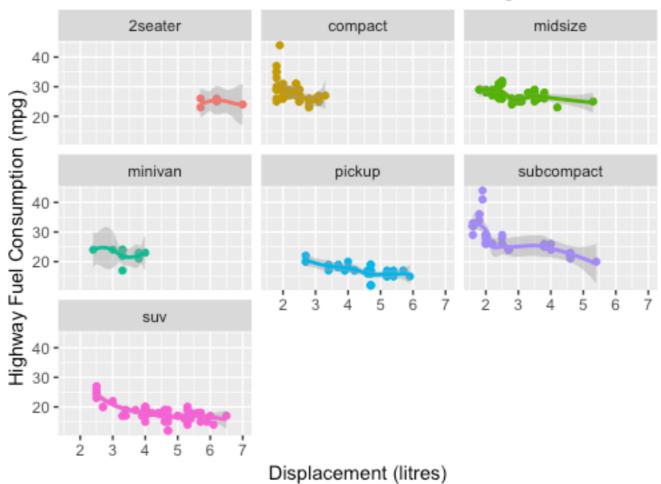
## Highway Fuel Consumption by Cylinder Displacement for Each Vehicle Class with Linear Regression Line



```
#now add a linear function to each
ggplot(mpg, aes(displ, hwy, colour = class)) +
   geom_point() + facet_wrap(~class) +
   guides(colour = FALSE) + geom_smooth(method = "lm") +
   xlab("Displacement (litres)") + ylab("Highway Fuel Consumption (mpg)") +
   ggtitle ("Highway Fuel Consumption by Cylinder Displacement \nfor Each Vehicle Class with
Linear Regression Line")
```

## Highway Fuel Consumption by Cylinder Displacement for Each Vehicle Class with Non-Linear Regression Line



```
#now with a non-linear function to each
ggplot(mpg, aes(displ, hwy, colour = class)) +
   geom_point() + facet_wrap(~class) +
   guides(colour = FALSE) + geom_smooth(method = "loess") +
   xlab("Displacement (litres)") + ylab("Highway Fuel Consumption (mpg)") +
   ggtitle ("Highway Fuel Consumption by Cylinder Displacement \nfor Each Vehicle Class with
Non-Linear Regression Line")
```