Based on the plot, the more the vehicle weighs, the lower it gets per gallon on the highway.

Due to the plots heading downward as they go further along the graph, I would expect to have a negative linear model if I were to build one.

If the slope of a linear model predicting highway miles per gallon from the weight, a slope of -0.05 would indicate a decrease in the y-axis (highway mpg) the further along the x-axis (weight) it goes.

slope = -0.01

intercept = 57

The difference between my manual linear model and the predicted is rounded to about 0.07.