Calculate the mean yearly value using the average gas prices by month found in the “Final Project Data Set.”

Using the years as your x-axis and the annual mean as your y-axis, create a

scatterplot and a linear regression line.

Answer the following questions using your scatterplot and linear regression line:

1. What is the slope of the linear regression line?
2. What is the Y-intercept of the linear regression line?
3. What is the equation of the linear regression line in slope-intercept form?
4. Based on the linear regression line, what would be an estimated cost of gas in the year 2020?
5. What are the residuals of each year?
6. Select a current price that you have seen or paid recently for gas. Is that price within the range of the linear regression line or is it an outlier? Is it within the confidence interval of 5% or either end?