**1.) Refer to the real estate data. Determine whether there is a difference in the mean selling price of homes with an attached garage and homes without an attached garage.**

 **Homes with an attached garage**

1. **Mean =**
2. **Standard Deviation =**
3. **Number =**

 **Homes without an attached garage**

1. **Mean =**
2. **Standard Deviation =**
3. **Number =**

 **2.) Refer to the GM car data in Blackboard which shows the number of cars (in millions) sold in the United States for various years and the percent of those cars manufactured by GM. Use a statistical software package to determine whether the number of cars sold is directly or indirectly related to GM’s percent of the market. Draw a scatter diagram to show you conclusion.**

**3.) Refer to the Real Estate data in Blackboard. Use the selling price of the home as the dependent variable and determine the regression equation with the numbers of bedrooms, size of the house, whether there is a pool, distance from the center of the city, township, whether there is an attached garage, and the number of bathrooms as independent variables.**

1. **Write out the regression equation. How much does a garage or an extra bathroom add to the selling price of a home?**
2. **Determine the value of R-squared. Provide an interpretation of the variance R-squared represents.**
3. **Develop a correlation matrix. Which independent variables have strong or weak correlations with the dependent variable (price)?**