

# Choosing Car Payments



**SAMPLE PROJECT**

# Background Story



- You have just won a game show. As a winning prize you receive thirty-five thousand dollars. With your winning prize money you chose to buy a car. After some research you are left to choose between a Ford Focus and Ford fusion. In order to decide which car to purchase you turn your information into an equation. Using the equation you find which monthly payment better suits you.

# Ford Fusion



- Total Cost : 20,00 Dollars
- MPG: 27
- Equation :  $20,000 + 12x < 35000$

Solving the equation:

1.  $20,000 - 35,000 = 15000$

2.  $15000 / 12 = 1,250$

- Monthly Payment :  $X = 1,250$  dollars



# Ford Focus



- Total cost: 16,200
- MPG: 27
- Equation:  $16,200 + 12x < 35,000$

Solving the equation

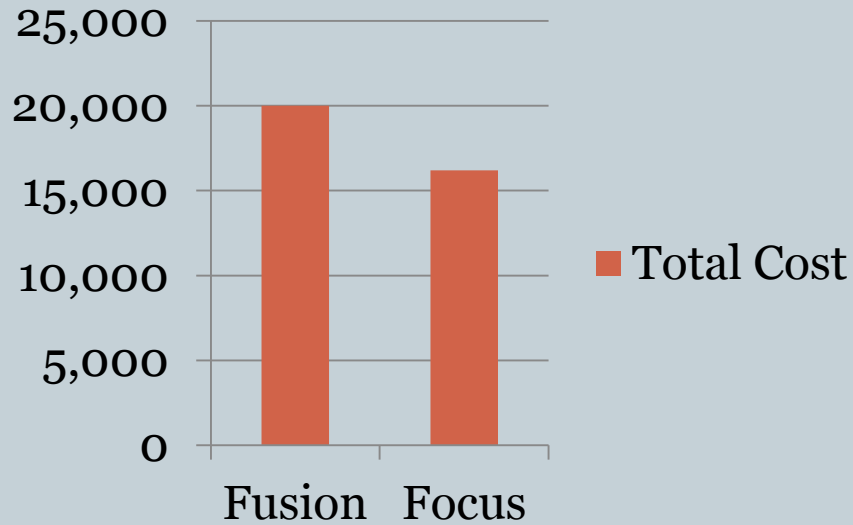
1.  $16,200 - 35,000 = -18,800$
2.  $-18,800 / 12 = -1,566.67$
3. Monthly Payment:  $X = 1,250$  dollars



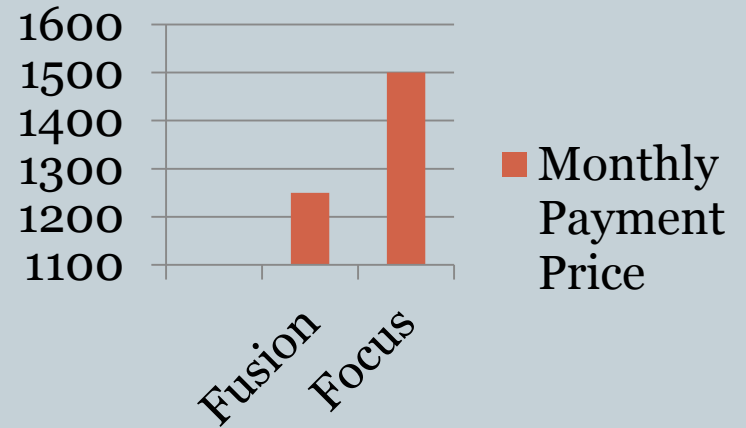
# Graphing the Data



## Total Cost



## Monthly Payment Price



# Which car to choose



- After looking over the data you decide to choose a Ford Fusion. After solving the linear equation you notice that the Fusion has a cheaper monthly payment rate of 1,250. While the focus consists of a rate of 15,000. Based on the features and price the best decision would be to purchase the Fusion.