

Dream Car Spreadsheet

This spreadsheet lesson is a culminating activity for the unit on Spreadsheets. The percents should be automatically calculated (9% for the tax rate and 12% for the interest rate). Students will select the type of dream car they wish to buy with all of the options added. They could purchase a used car which would reduce their monthly payment. After tax and discounts are calculated students can begin adjusting their monthly payment by the number of years needed to finance the dream car. Guidelines will be given by the teacher as to how much they can spend monthly which corresponds to their class grade.

PROCEDURE

The students will input the car, its base price and options they want on their car from their homework research. Students will skip the years old column for a discount. After the spreadsheet calculates the tax, and arrives at a principal for the loan, then the number of years of financing will be selected. After manipulating these columns, then the student may lower the sticker price by choosing a used car discount or choosing less options or even choosing a different car. The goal is for them to be able to afford a monthly payment based on their grade.

Base price + all of the Options = Sticker price

Sticker price + Tax (at 9%) = Sales Price

Sales price - (Years old x \$1000) = Discounted price

Principal of Loan = Discounted Price + Tax - Discount

Interest = Principal x Rate (12% as an example)

Loan Amount = Principal + (Interest x Number of Years of loan)

Monthly Payment = Loan Amount ÷ Number of Years of Loan

EXTRA CREDIT --- Show how you can reduce the monthly payment.

(i.e. show a line or bar graph of the monthly payment vs years old the car is OR monthly payment vs the numbers of years of the loan)