Buying a Dream Car- Using Excel Functions-
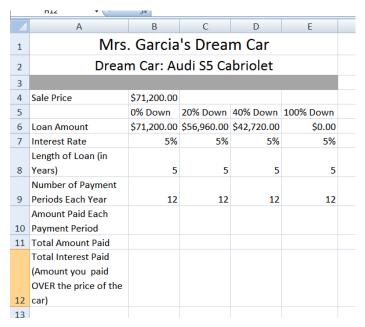
1. Description: In this activity, you will create a worksheet to calculate the <u>actual cost</u> of purchasing your dream car. You will then pose several "what if" questions about the proposed purchase terms of this dream car to see how various terms affect the amount of interest paid for the car.

2. **Research the cost of your dream car on the internet**, it can be new or used.

3. Create a new Microsoft Excel worksheet like the one below; <u>put the correct Car Type and Price of the car on your Excel worksheet</u>. MAKE SURE THE DATA GOES IN THE CORRECT CELL!

	A	B	C	D	E
1		Mrs. Garcia's Dream Car			
2		Dream Car: Audi S5 Cabriolet			
3					
4	Sale Price	$71,200.00			
5		0% Down	20% Down	40% Down	100% Down
6	Loan Amount	$71,200.00	$56,960.00	$42,720.00	$0.00
7	Interest Rate	5%	5%	5%	5%
8	Length of Loan (in Years)	5	5	5	5
9	Number of Payment Periods Each Year	12	12	12	12
10	Amount Paid Each Payment Period				
11	Total Amount Paid				
12	Total Interest Paid (Amount you paid OVER the price of the car)				
13					

4. Worksheet Titles: Merge and Center A1-E1, make your title size 18.   Merge and Center A2-E2 and make your subtitle size 16. Fill A3:E3 with any color.

5. Column Width: Adjust Column A's width to 19

6. Word Wrap: Enter cell contents in column A, Word Wrap the contents.

7. Formatting Currency: Format cell B4, Row 6, Row 10, Row 11, and Row 12 as Currency.

8. Type the "Percent Down" in each column in Row 5 to match the picture.

9. Type the "5%" interest rate in the correct columns in Row 7, Type "5" in the correct columns in Row 8, and Type "12" in the correct columns in Row 9.

10. Type the Following Formulas in the Following Cells:

B6: Type **=B4**

C6: Type **=B4*80%**

D6: Type **=B4*60%**

E6: Type **=B4*0%**

11. <u>Microsoft Excel's Periodic Payment Function</u>

PMT Function: Click cell B10, go to the "Formulas" Tab on the Ribbon. Click "Insert Function." Select "Financial" from the Category list, then choose "PMT" from the Function Name list. Click OK.

Type the following cell references in the PMT dialog box.

- For Rate (the interest rate per period for the loan), type **B7/B9**
- For Nper (the total number of loan payments), type **B8*B9**
- For Pv (loan amount), type **B6.** Choose OK.

    Microsoft Excel returns a negative number to indicate that you are making a payment.

12. "Total Amount Paid" Formula: In B11, type the following formula, which will calculate the total amount paid for a loan: **=SUM(B10*(B8*B9))**

13. "Interest Paid" Formula: In B12, type the following formula which calculates the total amount of interest paid: **=SUM(B11+B6)**, which is the total amount paid minus the loan amount.

Once you format the cell contents of B10, B11, and B12, entering appropriate formulas where necessary, you can **copy** cell content across the rows and format to columns C and D using **Autofill.**

** Add a picture of your car to your Excel Spreadsheet. It should look similar to the spreadsheet below when you are finished.

	A	B	C	D	E
1		Mrs. Garcia's Dream Car			
2		Dream Car: Audi S5 Cabriolet			
3					
4	Sale Price	$71,200.00			
5		0% Down	20% Down	40% Down	100% Down
6	Loan Amount	$71,200.00	$56,960.00	$42,720.00	$0.00
7	Interest Rate	5%	5%	5%	5%
8	Length of Loan (in Years)	5	5	5	5
9	Number of Payment Periods Each Year	12	12	12	12
10	Amount Paid Each Payment Period	-$1,343.63	-$1,074.91	-$806.18	$0.00
11	Total Amount Paid	-80617.91	-64494.33	-48370.75	$0.00
12	Total Interest Paid (Amount you paid OVER the price of the car)	-$9,417.91	-$7,534.33	-$5,650.75	$0.00
13					