CS 100 Excel Midterm Review

Complete each of these tasks in the ExcelMidtermReview.xlsx workbook.

Task	Name	Description
X	**Documentation**	Create a new sheet called Documentation. Position it as the first (left most) sheet in the workbook, and type your first and last name in cell A1.
	Sheet1	Rename Sheet1 to HousingPrices .
Complete the remaining steps on the HousingPrices worksheet.		
A	**Merge and Center**	In cell A1, type the words Average Housing Prices in the United States. Merge and Center these words across columns A through M. Set the font to be Verdana, size 26. Set the font color to be Dark Red (the left-most color on the Standard colors row of the colors menu). Modify the row height so the text just fits.
B	**Currency Format**	Format the numeric values in B3:G47 provided so they are currency format (two decimals). If you see #####, increase column width.
C	**Average Home Price by State**	In cells H3:H47, write a formula to calculate the average home price for each state from July through December.
D	**Index Price**	In cell D60, write a formula to calculate the lowest of the averages in column H. In cell D61, write a formula to calculate the highest of the averages in column H. In cell D62, calculate the *Index Price* as the average of the values in cells D60 and D61 multiplied by the index percent in cell D59.
E	**Index Price or Above?**	In cells I3:I47, using the IF function, test the average home price of each state to see if it is greater than or equal to the Index Price. If it is greater than or equal to the index price, the cell should contain the value **At or Above Index**. Otherwise, the value of the cell should be 0 (zero).
F	**States Below Index**	In cell D64, write a formula to count the number of states whose average home price is less than the Index Price. (Hint, what value should all of these cells have if you completed the previous question correctly?)
G	**Down Payment**	In J3:J47, write a formula to calculate the down payment required for a home in each state, based upon the percentage shown in D58, of the average home price for each state. Format as currency.
H	**Mortgage Amount**	In cells K3:K47, write a formula to calculate the mortgage amount (average selling price minus the down payment). Format as currency.
I	**Orientation and Print Area**	Set the orientation of this sheet to landscape. Set the print area to include columns A through I.
J	**Summary Info**	In cells B53:B56, write a VLOOKUP formula to find the July values for the states in A53:A56 as specified in the original data in columns A through H at the top of the worksheet. (Don't forget to use an absolute address for the table). Format these values as currency.
K	**Sparklines**	Create line spark lines in column M showing the housing price trends for each state from July through December.

L	**Chart**	Create a Clustered column chart showing the average housing price for the first ten states (AL through GA) on the HousingPrices sheet. Place the state abbreviations from column A along the chart's vertical axis. Set the chart title to **Average Housing Prices by State**. Locate the left corner of the chart at column O row 1. Position the legend at the bottom. Name the series **Average Price**. Your chart should look like the chart shown here.
M	**Monthly Payment**	In cells L3:L47, write a formula to calculate the monthly payment in each state given the mortgage value in column K, for a 30 year fixed mortgage with an annual interest rate of 5%. Use the values from H58 and H59 in your formula. Format these values as currency.