Please solve the following problems by midnight on Sunday, June 19. Do not forget your Documentation sheets.

- 1. The following refer to the file **Rock.xlsx**.
 - a. How many of the songs were not sung by Britney Spears?
 - b How many of the songs were played before June 15, 2004?.
 - c. How many of the songs were sung by singers whose last names begin with "M"?
 - d. How many songs were sung by singers whose name contains an "r"?
 - e. How many of the songs were at least four minutes long and sung by Mandy Moore were played in 2007 or earlier?
- 2. The file **Numbers.xlsx** contains a set of numbers. Count how many of these numbers are between 2 and 12 inclusive.
- 3. Use the file **Makeup.xlsx**, which contains information about the sale of various makeup products by the sales force, to answer the following questions.
 - a. For each product determine the total number of units and dollar volume sold.
 - b. Determine total revenue earned before December 10, 2005.
 - c. How many units of makeup or sold from January 15, 2004, through February 15, 2005
- 4. Using the data found in **Makeup.xlsx** and using subtotals answer the questions below: (Please have a separate sheet in your workbook for each problem. You should start with a fresh copy of the data on all solution sheets.)
 - a. Find the units sold and revenue for each salesperson.
 - b. Find the number of sales transactions for each product.
 - c. Find the largest transaction (in terms of revenue) for each product.
 - d. Fid the average dollar amount per transaction by region.
- 5. The file **Sumifrows.xlsx** contains sales data during several winter, spring, summer, and fall quarters. Determine the average sales during the winter, spring, summer, and fall quarters for this data.

VBA (These are to give you practice using loops, cells and functions and recording actions in Excel to see what the underlying VBA code looks like so you can take what you need from it.) The answers to all of these should be in the same workbook, just on different sheets. Do not forget your Documentation sheet and your run buttons.

- 6. Write a sub that asks the user for a positive integer less than 100. Using a For Next loop sum all the odd numbers from 0 to the number entered. Display the results of this calculation with proper verbiage in a MsgBox. Assume 0 is an even number for our purposes.
- 7. Change problem 5 above so that it calls a function named DisplaySumEven that displays the sum of the even numbers between 0 and the number entered.
- 8. Rewrite the Sub in VBA problem 5 above so that it displays the following results in the active worksheet:
 a. Enters in column B of the active worksheet each of the odd numbers between 0 and the number.
 b. Calculates the sum of the odd numbers places it on the worksheet as shown below. You might wish to record a macro that changes the horizontal alignment in a cell to center. You can then use this command in your sub.

See attached file Problem 3 Example for the output when the number being entered = 10.