

## Spreadsheet Homework

- Use these instructions to modify an income projection spreadsheet for a small Garden Cafe. *Parameter* values should be used whenever appropriate.

<b>SAVE YOUR WORK FREQUENTLY!!</b>
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- 1) Copy the file *GARDEN.XLS* from the **OUT** folder on the *CSC-101* server to your USB drive.
  - 2) Rename the file on your disk as *last first cafe* followed by **.xls** (or **.xlsx**)
  - 3) Insert a new row below the *Marketing Expense* row. Add the following data:  
Administrative Expense 77 79 69
- Format cells in the spreadsheet as follows:
    - 1) Resize cells so that values/labels fit nicely.
    - 2) Center align the Month names - Also make them **BOLD**.
    - 3) Center the Title Lines (April's Flower Garden etc.) across columns B,C,& D
  - Working only with the first month (Jan), add formulas for the following:
    - 1) the *Cost of Goods Sold* (52% of the *Sales* value)
    - 2) the *Gross Margin* (*Sales* minus the *Cost of Goods Sold*)
    - 3) the *Total Expense* (the sum of all expenses)
    - 4) the *Net Income Before Tax*
    - 5) the *Federal Tax* (assume a 48% tax rate applied to net income)
    - 6) the *Net Income After Taxes*
  - Working with all of the data:
    - 1) Format all numbers with the 0,000.00 format using the “,” button. (Alternatively, go to **Format**>*Format Cells* in the **Home** ribbon, click the “Number” tab and choose the “Accounting” category.)
    - 2) Format the rows for: *Gross Margin*, *Total Expense*, and *Net Income After Taxes* using the \$ format. (Do these rows only.) Also add a small border and a gray shading to these rows (only).
    - 3) Make the *Cost of Goods* rate and the *Federal Tax* rate parameters in another part of your spreadsheet. Label and format these appropriately.

- 4) Change your formulas to reference these parameter values. (Use absolute references.)
- 5) Test your January result for accuracy.
- Replicating Your Work
  - 1) Save your work (just a reminder).
  - 2) Replicate the formulas for January into the columns for February and March; check the formatting for consistency.
  - 3) Make the Sales figures for February and March use a formula so that they are 10% larger than the previous month.
  - 4) Make the Marketing Expense figures for February and March use a formula so that they are 5% larger than the previous month.
  - 5) Using the *Move or Copy Sheet* command from the **Home** ribbon (under *Format* in the *Cells* group), copy this entire worksheet onto sheet 2, 3, and 4, and rename the sheets Qtr2, Qtr3, and Qtr4.
  - 6) Make necessary changes to those sheets. Change the following Sales figures:

Month:	April	July	Oct.
Sales:	2500	475	2800
- Also, note that the *Cost of Goods* and *Federal Tax* rate parameters should be on the first sheet only. (Hint: Your formulas can refer to cells on other worksheets too. Just precede the cell number with the worksheet name and an exclamation point, for example – Qtr1!C3)
- 7) Add a Year-end Total formula to worksheet 4 (now called Qtr4) summing the *Net Income After Taxes* values from all four worksheets.
- 8) Return to the first quarter sheet and change the *Sales* value for January to 500.
- 9) Revise the *Federal Tax* calculation to avoid the negative value in a logical way. (There's no negative tax -- the government does NOT pay you taxes! 😊)
- 10) Replicate the revised formula to all other locations as needed. (Keep in mind that data may someday change throughout the worksheets of your spreadsheet.)
- 11) Add a chart to each sheet showing *Net Income After Taxes* for each quarter. Experiment with different styles of charts. (Use at least three different styles for the four worksheets in your final version.) Format the charts nicely.
- 12) Place a copy of the revised spreadsheet into the **IN** folder. DO NOT PRINT ANYTHING.