

## IFS 104 Homework #2

The problems focus on the material presented in Chapter 2 of our textbook. Use the concepts and examples in this chapter as your guide. Save all your files in the homework02 folder on your k: drive.

1. Complete “In The Lab 1 Illiana Custom Homes” on page 132.
2. Complete “Cases & Places 3 Super Store Furniture” on page 142.
3. Naperville Animal Control is really struggling with the squirrel population in our fair city. They trap squirrels in selected subdivisions on the city and record how many are pregnant and their death rate. This data is in Table 1 below.

Advanced and learned scientists from the Squirrel Eradication Unit of the city have devised a formula to use this data to approximate the squirrel population in each neighborhood:

$$\text{Total squirrels in subdivision} = 17 * (\text{squirrels caught} + \text{pregnant squirrels}) - 17 * \text{death rate} * (\text{squirrels caught} + \text{pregnant squirrels})$$

Enter the data into a worksheet and use this formula to estimate the squirrel population of each subdivision. Finally, these 6 subdivisions are merely a sample of Naperville’s 122 total subdivisions. Use the average squirrel population for a subdivision to determine the total for all the neighborhoods in the city of Naperville.

<b>Naperville Animal Control Squirrel Data</b>			
	<b>Squirrels Caught</b>	<b>Squirrels Pregnant</b>	<b>Annual Death Rate</b>
<b>River Woods</b>	5	2	53%
<b>Downtown</b>	8	6	44%
<b>Bonnema Woods</b>	7	3	54%
<b>Hobson Mill</b>	6	4	60%
<b>Book Road</b>	3	1	61%
<b>Walnut Springs</b>	4	2	51%

*Table 1*

4. Kemper Mortgage pays its sales people a base salary and a 4.50% commission on sales during the year. The salary information for each employee (name; base salary; projected sales) is: Brian Krieger \$25,000 base salary; \$550,600 sales... Giovanni Martini \$56,000; \$825,000... Lisa Martini \$43,500; \$362,900... Phillip Rivers \$16,950; \$622,900... Vladmir Putin \$19,000; \$750,000.

Develop a worksheet that calculates the commission amount and total salary for each employee at Kemper. These formulas are pretty easy:

- $\text{Commission} = 4.50\% * \text{Sales}$
- $\text{Total salary} = \text{Base salary} + \text{Commission}$

Calculate the total, average, lowest and highest values for each employee.

Create a 3-D pie chart on a separate sheet showing the portion each employee's total salary contributes to the total.

5. **Web special** –Let's import data from last weekend's Chicago Bears game. Use the `Data/Import External Data/New Web Query` menu to get started. The boxscore results of the games are usually are [sports.yahoo.com/nfl](http://sports.yahoo.com/nfl) . Select the boxscore for the Bears game. Then, select the Passing, Rushing and Receiving sections to be imported. Once you've imported the statistics:
- Delete all the results that aren't for Chicago Bears players
  - For each section (passing, rushing, receiving), add rows to calculate the average, lowest and highest values for each column.
  - Format, format, format:
    - Make the font size of all text at least 12
    - Make the numbers `Courier New` font
    - Give the averages all one decimal point of precision
    - Don't forget that the Bears' colors are orange and blue.
    - Add space, color, bold, and more to make your three sub-tables stand out.