

# Girl Scout Cookie Excel Analysis

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## Step 2 Using Formulas

For Table 1:

- a) What is the total number of boxes ordered by all scouts?
  - 1. 660 boxes
- b) What is the total revenue from all boxes sold by all scouts?
  - 1. \$1996
- c) What is the total net profit of all scouts combined?
  - 1. \$346
- d) What is the total number of cookies sold by all scouts?
  - 1. 10992 cookies
- e) What is the total calories sold by all scouts?
  - 1. 539,418 calories

For Table 2:

- f) What is the average number of cookies per box?
  - 1. 21.73 cookies
- g) What is the average calorie per box?
  - 1. 1082 calories
- h) Which cookie has the highest percentage of fat per serving size? What is this percentage?
  - 1. Lemonades Cookie: 26.66%
- i) Which cookie has the highest percentage of sugar per serving size? What is this percentage?
  - 1. Samoas/Caramel deLites: 32.86%
- j) If someone ate a whole box of Savannah Smiles, how much carb did this person consumed?  
(Total carb per box = carbs per serving \* servings per box)
  - 1. 144g of carbs

### Step 3: Sorting

a)

“Number of cookies per box” sorted from highest to lowest

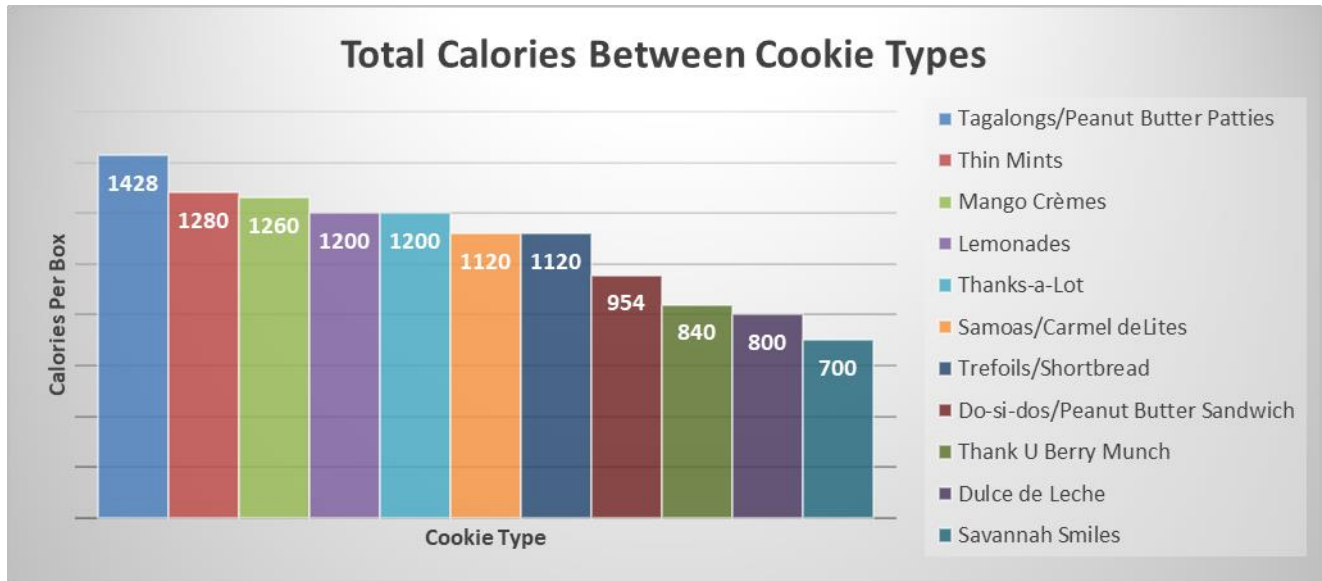
Type of Cookie	Cookies per box
Trefoils/Shortbread	40
Thin Mints	32
Savannah Smiles	25
Mango Crèmes	21
Tagalongs/Peanut Butter Patties	21
Dulce de Leche	20
Do-si-dos/Peanut Butter Sandwich	18
Samoas/Carmel deLites	16
Lemonades	16
Thanks-a-Lot	16
Thank U Berry Munch	14

“Total calories per box” sorted from highest to lowest

Type of Cookie	Total Calories per box
Tagalongs/Peanut Butter Patties	1428
Thin Mints	1280
Mango Crèmes	1260
Lemonades	1200
Thanks-a-Lot	1200
Trefoils/Shortbread	1120
Samoas/Carmel deLites	1120
Do-si-dos/Peanut Butter Sandwich	954
Thank U Berry Munch	840
Dulce de Leche	800
Savannah Smiles	700

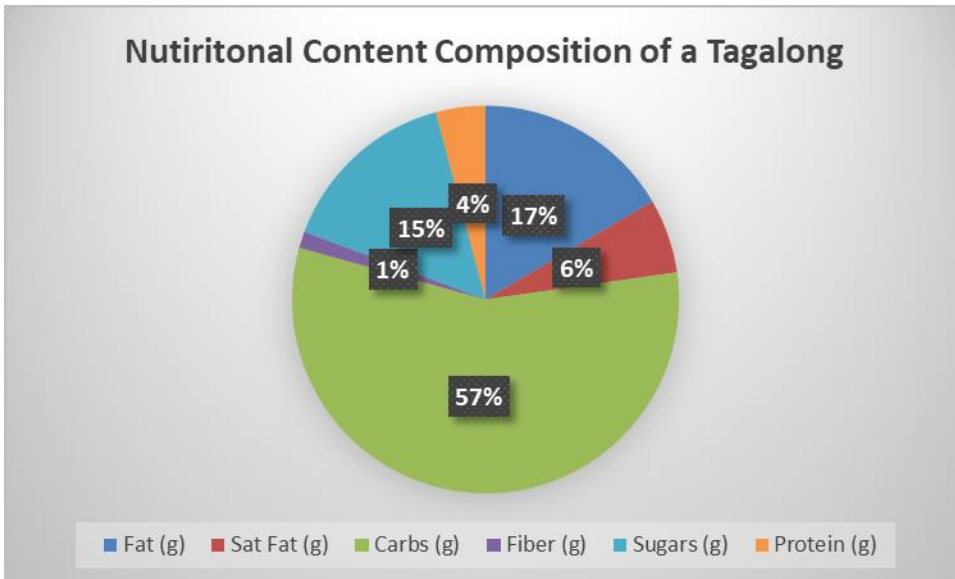
## Step 4: Charting

### a) Total Calories Per Box Chart



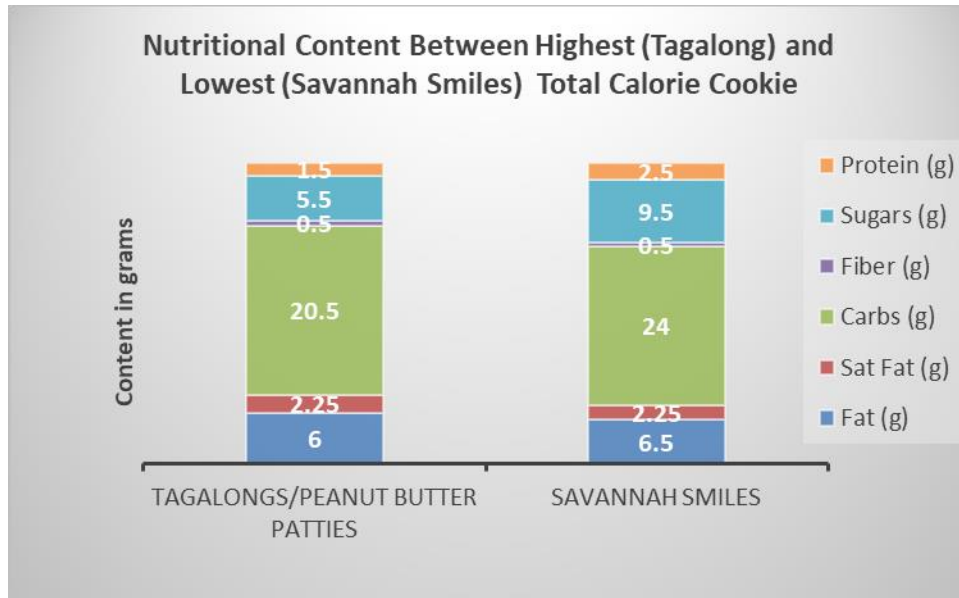
I made a descending bar graph depicting each cookie type in different colors. I chose this bar graph orientation to show a clear hierarchy of total calories. With a legend going from top to bottom in order, the viewer can see the type of cookies in relation to the color easily while still getting a hierarchical and sorted feel. The different colors provide more separation and uniqueness between each type of cookie.

**b) Comparing Percent Nutritional Content Highest Total Calorie Cookie**



When thinking about part of a whole, I immediately think of a pie chart. It is a good way to represent what makes up the part of the total. By indicating percent composition as well as a legend for the nutritional content label, the viewer can easily see which nutrients take up most of the tagalong.

- c) Comparing the nutritional content of the cookies with the highest and the lowest total calories per box



Making a side-by-side comparison between two similar items was a key consideration I made in deciding which graph to choose. Similar to the previous graph, this is a “parts of a whole” situation. Going with a 100% stacked bar graph allows each part of the whole to be seen in grams. Placing each cookie side by side allows the viewer to see the difference in composition based on the size of each segment.

## Step 5: Pivot Table – Part 1 (14 points)

- a) Which scout ordered the most boxes? How many boxes?
  - a. Katie and Ellen both tied for the most boxes ordered at 132
- b) Which cookie had the highest number of boxes sold? How many boxes sold?
  - a. Thin Mints were the most sold at 55 boxes
- c) Which cookie had the highest total number of cookies sold? How many cookies sold?
  - a. Trefoils had the most cookies sold at 2040 total cookies.
- d) Which cookie had the most boxes remaining? How many boxes remained?
  - a. Mango Cremes had the most boxes remaining with 28 boxes
- e) Which scout sold the most calories? Which cookie type contributed the most calories to her sales?
  - a. Katie sold the most calories with 111,994 total calories sold. Tagalongs contributed to the most calories for her total sales.
- f) Which scout earned the most net profit? How much did she earn?
  - a. Katie earned the most net profit with \$86 total.
- g) What is the total net profit for each troop? What is the total number of boxes sold for each troop?
  - a. Alpha: Total Net Profit = \$126, Boxes Sold = 169
  - b. Beta: Total Net Profit = \$124, Boxes Sold = 141
  - c. Alpha: Total Net Profit = \$96, Boxes Sold = 189

## Step 6: Pivot Table – Part 2 (12 points)

- a) Please explore two other questions of interest using Pivot Table. Please write the questions and your answers to the questions. Please try to challenge yourself and ask questions that can utilize Pivot Table for efficiency

1. Question 1

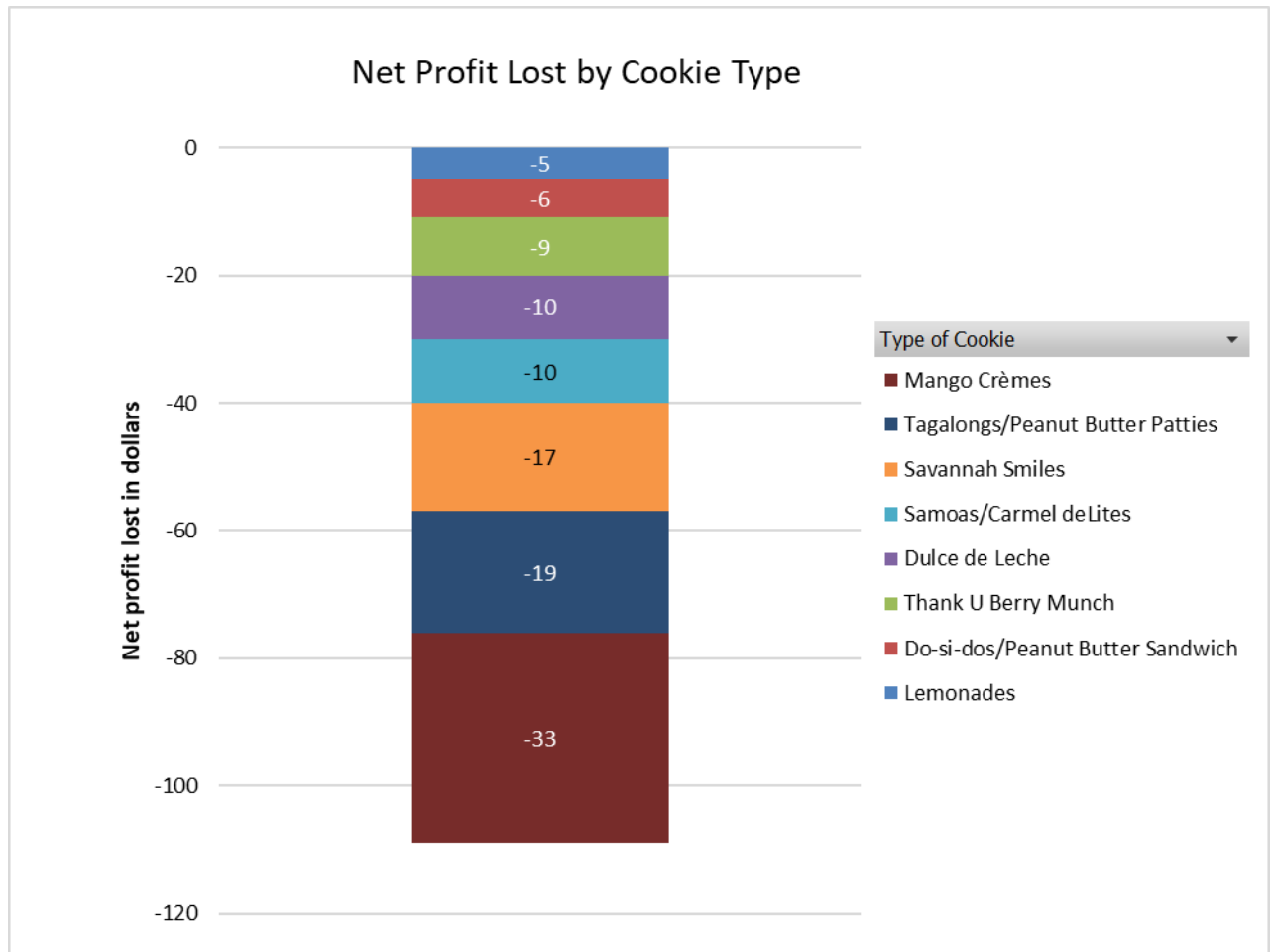
- Which cookie lost the most profit? How much profit did the company lose total?
  - Mango Cremes
  - They lost \$109 in net profit

2. Question 2

- What's the percentage of boxes remaining compared to boxes ordered? Which troop had the highest percentage of boxes remaining?
  - 24.4% of the total boxes remaining
  - Gamma had the highest percent of boxes remaining.

- b) For the two additional questions you choose to analyze, please create an appropriate chart for each question. Make sure that your data are sorted and your chart has all the essential chart elements – title, axis labels, unit, proper arrangement of chart elements, and legend if necessary

1. Chart Question 1





## 2. Chart Question 2

