# Microsoft Excel, 2016

## Assignment #3

In this assignment you will be working with about forty items that could be part of the inventory for a small local grocery store. You will be calculating gross margin, inventory, delivery and spoilage costs along with profit per item. Once calculated you will summarize this data and use the Excel "Goal Seek" tool to reach a desired profit level by changing inventory and delivery costs, and finally format the entire sheet for easier reading.

### Set-up

1) Open the spreadsheet "Inventory_start" and save it as "Inventory_LastName_FirstName" replacing the words LastName and FirstName with your name.

### Add Titles

2) In cell "A1" replace "Alex" with your first name.
3) Select Cells "A1" through "L1" and "Merge & Center" the cells, then apply a "Title" style.
4) Select cells "A2" through "L2" and "Merge & Center" the cells, then apply the "Heading 1" style.

### Calculate Costs and Totals

5) In column "F" calculate gross margin using the formula of "(price-cost)*quantity" which in cell "F4" results in the formula "=(C4-B4)*D4". Insert the formula and copy it down for each item sold (adjust the width of the column if necessary to see all of the results).
6) In column "G" calculate the inventory costs by multiplying the store standard (cell "O12") times the value of the merchandise in inventory (quantity in inventory*cost). In cell "G4" this results in the formula "=$O$12*B4*E4", enter this formula and copy it down for each item (adjust the width of the column if necessary to see all of the results).
7) In column "I" calculate the delivery cost by multiplying the number of deliveries times the standard delivery cost. If there are no deliveries listed, assume the store standard (2). The formula will use an "if" statement and the "ISNUMBER" function to check when a number has been supplied and when to use the store standard. The result of the "if" function will then be multiplied by the delivery charge. In cell "I4" this results in the formula "=If(IsNumber(H4),H4,$O$15)*$O$14", insert the formula and copy it down for each item (adjust the width of the column if necessary to see all of the results).
8) In column "K" calculate spoilage costs using a similar function to check and see if a spoilage percent has been provided, otherwise use the store standard for spoilage (1%) and multiply that times the value of the inventory in stock. In cell "K4" this results in the formula "=If(IsNumber(J4),J4,$O$13)*E4*B4", insert the formula and copy it down for each item (adjust the width of the column if necessary to see all of the results).
9) In column "L" calculate the profit per item by taking the gross margin minus the inventory cost, delivery cost and spoilage cost. In cell "L4" this results in the formula "=F4-G4-I4-K4", insert the formula and copy it down for each item (adjust the width of the column if necessary to see all of the results).

10) The totals in cells "O4" through "O8" are calculated by adding the values in columns "L", "F", "G", "I", and "K". Insert the appropriate functions to calculate the totals.

## Analyze/Adjust Total Profit

11) Using the "Goal Seek" analysis increase total profit to "$35,000" by adjusting the inventory cost shown in cell "O12" (it may take several iterations so be patient).
12) Using the "Goal Seek" analysis increase total profit to "$36,000" by adjusting the delivery charge found in cell "O14" (this may also take several iterations so be patient).

## Format the worksheet

13) Select the cells "A1" to "O1" and merge & center the cells. Set the style of cell "A1" to "Title"
14) Select the cells "A2" to "O2" and merge & center the cells. Set the style of cell "A2" to "Heading 1"
15) Set the width of column "A" to 160 pixels, the width of columns "B" – "L" to 100 pixels, the width of column "N" to 300 pixels, and the width of column "O" to 100 pixels.
16) Format cells "A3" through "O3" as bold, right aligned, with a bottom border, and style "20% - Accent 1" applied. Reset cell "A3" and "N3" to left aligned.
17) Format cells "O4" through "O8" in the "Accounting" format

## Finish the worksheet

18) Apply the "Organic" theme to the worksheet, and change the color scheme to "Orange".
19) Save the worksheet and add a comment in the document properties with your name and today's date.
20) Submit the worksheet following the instructions given to you by your instructor.