

## Excel 5 – Cost of Veggies

For this exercise students will complete a profit sheet for the vegetable garden. The project involves sorting by weight – largest to smallest; developing formulas to figure out gross income, total production cost, and net income; and creating a chart that shows net income.

### Instructions

**Download these files:** [Excel 5 Outline - Cost of veggies](#), [Cost of veggies.xlsx](#)

### Objectives

- Open a spreadsheet
- Save a workbook
- Use the Now function

### The spreadsheet must include:

- Edit a workbook
- Complete all calculations
- Format data correctly

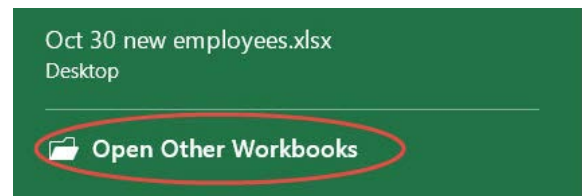
- Format numbers
- Develop formulas to figure gross income, production cost, and net income
- The total project summary in each report
- The Total, Average and Median on each report

## 1. Open the workbook

1. **Open:** *MS Office 2013 Excel* spreadsheet program
2. **Download:** the *Cost of Veggies* spreadsheet from this assignment to your class folder
3. **Double click:** on *file name* to open

**Or**

1. **Open:** *MS Office 2013 Excel* spreadsheet program
2. **Select:** *Open Other Workbooks*, find the *Cost of Veggies* file and **open**





## 4. Calculate Totals

**Add the total number of pounds produced:**

1. **AutoSum** the *total pounds* produced

Gross Income for each product is calculated by multiplying Pounds by Price per Pound.

**Calculate Gross Income for each row:**

1. **Insert:** the *formula for Gross Income* in **cell D5**.
2. **Click:** on the handle **and drag** the *box* down to **cell D14**.

**Note:** **Autofill** copies the formula AND replaces the cell reference numbers to corresponding rows.

3. **Select: AutoSum** to calculate the total for Gross Income by adding all the cells under Gross Income

Profit Sheet of the Ve			
<b>Gross Profit</b>			
<b>Total Cost</b>		Add name here	
<b>Net Profit</b>			
Produce	Pounds	Price per Pound	Gross Income
Cucumber	200	\$ 0.75	\$ 150.00
Radish	10	\$ 0.55	\$ 5.50
Onion	20	\$ 0.45	\$ 9.00
Green Bean	125	\$ 0.85	\$ 106.25
Okra	35	\$ 0.94	\$ 32.90
Tomatoes	200	\$ 0.95	\$ 190.00
Bell Pepper	15	\$ 1.01	\$ 15.15
Jalapeno	6	\$ 0.99	\$ 5.94
Eggplant	13	\$ 2.19	\$ 28.47
Asparagus	75	\$ 1.69	\$ 126.75
<b>Total</b>	<b>699</b>		<b>\$ 669.96</b>

## 5. Calculate Total Production Cost

Total Production Costs for each product are calculated by multiplying Pounds x Production Cost per lb.

**Calculate Total Production Costs:**

1. **Insert:** the *formula for Gross Income* in **cell F5**
2. **Click:** on the handle **and drag** the *box* down to **cell F14**
3. **Select: AutoSum** to calculate the total for *Total Production Costs*

Gross Income	Production Cost per lb	Total Production Cost	Net Income
\$ 150.00	\$ 0.05	\$ 10.00	
\$ 5.50	\$ 0.02	\$ 0.20	
\$ 9.00	\$ 0.08	\$ 1.60	
\$ 106.25	\$ 0.03	\$ 3.75	
\$ 32.90	\$ 0.02	\$ 0.70	
\$ 190.00	\$ 0.05	\$ 10.00	
\$ 15.15	\$ 0.03	\$ 0.45	
\$ 5.94	\$ 0.02	\$ 0.12	
\$ 28.47	\$ 0.06	\$ 0.78	
\$ 126.75	\$ 0.90	\$ 67.50	
<b>\$ 669.96</b>		<b>\$ 95.10</b>	

## 6. Calculate Net Income

Net Income for each product is calculated by taking Gross Income minus Production Costs.

**Calculate the Net Income :**

1. In cell C5 create a *formula* for *Gross Income minus Total Production Costs*
2. **Click:** on the handle **and drag** the *box* down to cell G14
3. **Select: AutoSum** to calculate the total for *Total Net Income*

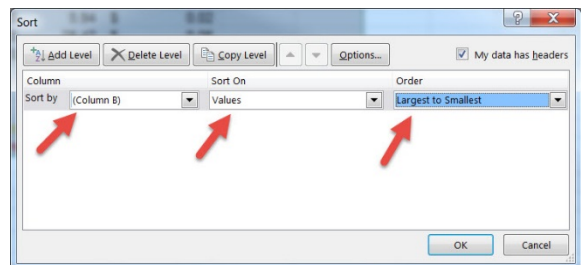
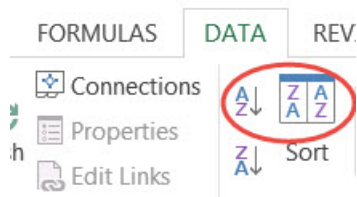
	Gross Income	Production Cost per lb	Total Production Cost	Net Income
\$	150.00	\$ 0.05	\$ 10.00	\$ 140.00
\$	5.50	\$ 0.02	\$ 0.20	\$ 5.30
\$	9.00	\$ 0.08	\$ 1.60	\$ 7.40
\$	106.25	\$ 0.03	\$ 3.75	\$ 102.50
\$	32.90	\$ 0.02	\$ 0.70	\$ 32.20
\$	190.00	\$ 0.05	\$ 10.00	\$ 180.00
\$	15.15	\$ 0.03	\$ 0.45	\$ 14.70
\$	5.94	\$ 0.02	\$ 0.12	\$ 5.82
\$	28.47	\$ 0.06	\$ 0.78	\$ 27.69
\$	126.75	\$ 0.90	\$ 67.50	\$ 59.25
<b>\$</b>	<b>669.96</b>		<b>\$ 95.10</b>	<b>\$ 574.86</b>

## 7. Sort Weight – largest to smallest

Sort the produce by weight, largest to smallest:

1. **Select:** the *cells* to sort
2. **Select:** *Data Tab, Sort A-Z*
3. **Select:** the *column* to sort
4. **Sort:** by *value*
5. **Sort:** by *order - largest to smallest*
6. **Verify:** all the columns have sorted correctly

Produce	Pounds	Price per Pound	Gross Income	Production Cost per lb	Pro
Cucumber	200	\$ 0.75	\$ 150.00	\$ 0.05	
Radish	10	\$ 0.55	\$ 5.50	\$ 0.02	
Onion	20	\$ 0.45	\$ 9.00	\$ 0.08	
Green Bean	125	\$ 0.85	\$ 106.25	\$ 0.03	
Okra	35	\$ 0.94	\$ 32.90	\$ 0.02	
Tomatoes	200	\$ 0.95	\$ 190.00	\$ 0.05	
Bell Pepper	15	\$ 1.01	\$ 15.15	\$ 0.03	
Jalapeno	6	\$ 0.99	\$ 5.94	\$ 0.02	
Eggplant	13	\$ 2.19	\$ 28.47	\$ 0.06	
Asparagus	75	\$ 1.69	\$ 126.75	\$ 0.90	
<b>Total</b>					

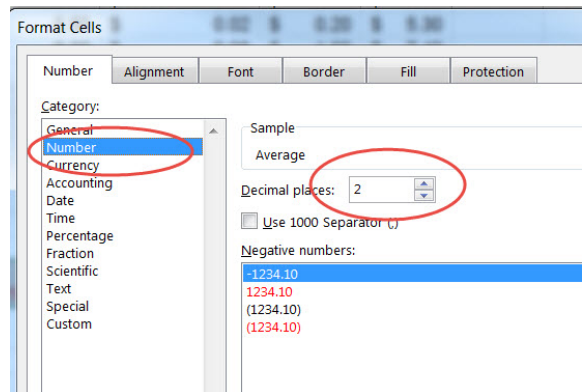


## 8. Calculate the Average Price

The AVERAGE function adds a group of values, then divides the result by the number of values in the group.

### Calculate the Average for each column:

1. **Select:** the *cell* in the *Average row* under *Pounds*
2. **Select:** AVERAGE (from the list under **AutoSum**)
3. **Change:** the *cell reference number* to include **only** the *Produce items*; (make sure the Totals are not included in the formula)
4. **Average:** the *numbers* for each column
5. **Set:** the *decimal places* to .00
6. **Repeat:** for *Gross Income, Total Production Costs, and Net Income*



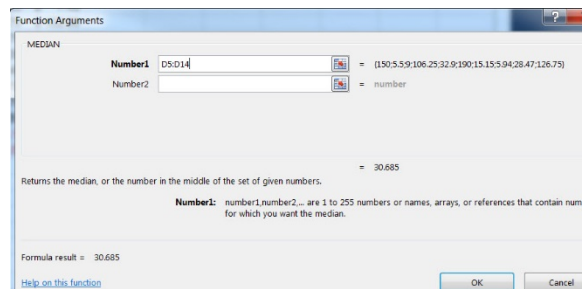
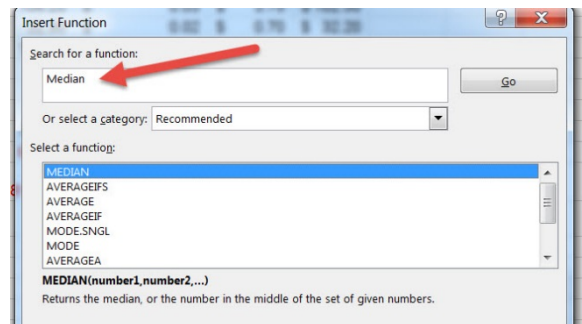
## 9. Calculate the Median Price

The MEDIAN function determines the middle value that includes the same number of values above it as below it. It is frequently used to describe the price of houses in a geographical area.

It differs from AVERAGE in that the result is not affected as much by a single value that is greatly different from the others.

### Calculate the Median for each column:

1. **Select:** the appropriate *cell* in the *Median row*
2. **Select:** *Median function* from the list under AutoSum - More Functions
3. **Enter** the cell reference numbers by either **selecting the values** with the mouse (**click, hold, and drag**) **or type** the *range of values*




4. **Calculate:** the *Median* for Pounds, Gross Income, Total Production Costs, and Net Income

## 10. Project Summary

1. Using the cell references complete the **Total Project Summary** for Gross Profit, Total Cost, and Net Profit
2. Include the Total, Average, and Median

## 11. Create a chart that shows net income

A chart is the graphic representation of data in the worksheet. The Quick Analysis tool recommends the right chart for your data and gives you a visual presentation in just a few clicks.

1. **Select** the cells that contain the data you want to show in a chart. Do not select the title.
2. **Click the Quick Analysis button**  that appears in the lower-right corner of your selection.
3. **Click Charts**, move across the recommended charts to see which one looks best for your data, and then click the one that you want.
4. **Move** the chart into a position beside or below the information.



**Note:** Excel shows different charts in this gallery, depending on what's recommended for your data.

Learn about other ways to [create a chart](#).

## 12. Save your work

Click the **Save** button on the **Quick Access Toolbar**, or press Ctrl+S.



### 13. Upload the completed spreadsheet to Excel 5 - Cost of Veggies

After completion save the file one more time then upload the file to this assignment:

3. **Click:** on the *title*
4. **Select:** *Add Submission*
5. **Drag and drop** the *file* into the box **or select** the *file to upload*
1. **Select:** *Save Changes*

