

**Office 2016– Excel Basics 02**  
**Video/Class Project #14**

**Excel Basics 2: Introduction to Excel 2: Excel's Golden Rule for Formulas, Formula Inputs, & Charts**




**Goal in video:** Create Net Income Projections Table and Chart that allows easy update.

Topics Covered in Video:

- 1) Synonym for Sheet or Worksheet is “Spreadsheet”
- 2) Format Cells Dialog Box
  - i. Keyboard = Ctrl + 1
  - ii. Format Cells Dialog Box allows us to add formatting to the cells with the following Tabs:
    1. Number
    2. Alignment
    3. Font
    4. Border
    5. Fill
    6. Protection
- 3) **Excel’s Golden Rule:**
  - i. If a formula input can change, put it into a cell and refer to it in the formula with a cell reference.
  - ii. If a formula input will not change, you can type it into a formula (like 12 months in a year or 7 days in a week).
  - iii. Always label your formula inputs so that the formula input can be clearly understood by any user of the spreadsheet solution; by doing this we properly “document the spreadsheet solution (model).”

The infographic features a green background with a white border. At the top, a dark green rounded rectangle contains the title "Excel's Golden Rule:" in white text. Below this, three light green rounded rectangles are stacked vertically, each containing a white Excel icon (a green 'X' on a white background) to the left of the text. The text in each box is white and matches the corresponding point in the list above.

**Excel's Golden Rule:**

-  If a formula input can change, put it into a cell and refer to it in the formula with a cell reference.
-  If a formula input will not change, you can type it into a formula (like 12 months in a year or 7 days in a week).
-  Always label your formula inputs so that the formula input can be clearly understood by any user of the spreadsheet solution.

iv.

4) The complete Net Income Projections Table and Chart looks like this:

	A	B	C	D	E	F	G	H
1	2017 NI Projections	Jan	Feb	Mar	Apr	May	Total	
2	Revenue	\$7,250	\$7,685.0	\$8,146.1	\$8,634.9	\$9,152.96	\$40,869	
3	Expenses	\$6,162.5	\$6,532.3	\$6,924.2	\$7,339.6	\$7,780.0	\$34,738.6	
4	Net Income	\$1,087.5	\$1,152.8	\$1,221.9	\$1,295.2	\$1,372.9	\$6,130.3	
5								
6	Assumptions (Formula Inputs)							
7	Start Revenue for Jan	\$7,250						
8	Revenue % Increase	106.0%						
9	Expense as % of Revenue	85.0%						
10								
11								
12								
13								
14								
15								

Month	Net Income
Jan	\$1,087.5
Feb	\$1,152.8
Mar	\$1,221.9
Apr	\$1,295.2
May	\$1,372.9

For all the numbers that could change in our formulas, we put them into an Assumption Table or Formula Inputs Table. This makes it easy to change the numbers.

All the numbers in the chart are linked to the Net Income Projections Table.

The numbers we see in the Net Income Projections Table are created with Formulas. Everything in this table is Formulas!!!

**Any Number we change in the Assumption Table will instantly change the numbers in the Net Income Projections Table and the chart!!!!**

5) Formulas we created:

i. Start Revenue Formula (we are not copying this formula anywhere):

	A	B
1	2017 NI Projections	Jan
2	Revenue	=B7
3	Expenses	\$6,162.5
4	Net Income	\$1,087.5
5		
6	Assumptions (Formula Inputs)	
7	Start Revenue for Jan	\$7,250
8	Revenue % Increase	106.0%
9	Expense as % of Revenue	85.0%

1.

ii. Revenue Increase Formula (uses Relative and Absolute Cell References):

	A	B	C
1	2017 NI Projections	Jan	Feb
2	Revenue	\$7,250	=B2*\$B\$8
3	Expenses	\$6,162.5	\$6,532.3
4	Net Income	\$1,087.5	\$1,152.8
5			
6	Assumptions (Formula Inputs)		
7	Start Revenue for Jan	\$7,250	
8	Revenue % Increase	106.0%	
9	Expense as % of Revenue	85.0%	

1.

iii. Expense Formula (uses Relative and Absolute Cell References):

	A	B
1	2017 NI Projections	Jan
2	Revenue	\$7,250
3	Expenses	=B2*\$B\$9
4	Net Income	\$1,087.5
5		
6	Assumptions (Formula Inputs)	
7	Start Revenue for Jan	\$7,250
8	Revenue % Increase	106.0%
9	Expense as % of Revenue	85.0%

1.

iv. Net Income Formula (uses two Relative Cell References):

	A	B
1	2017 NI Projections	Jan
2	Revenue	\$7,250
3	Expenses	\$6,162.5
4	Net Income	=B2-B3
5		

1.

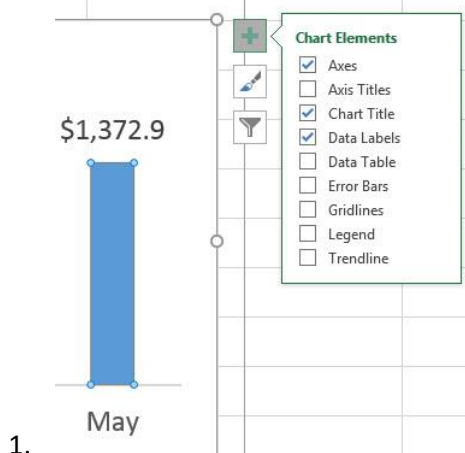
## 6) Charts

i. Insert Ribbon tab, Charts Group

ii. Chart Junk

1. Chart Junk = anything in chart that does not help to deliver message.

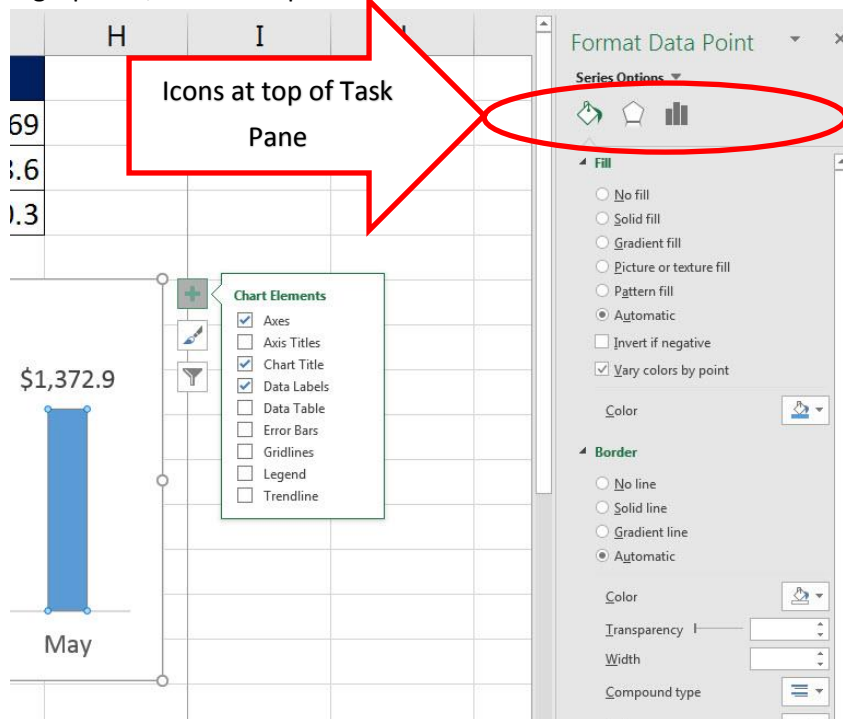
iii. Add Chart Title and Series Labels: Plus (+) symbol next to chart, link in this picture:



iv. Move Chart so that it “snaps to cell edge”: Drag chart edge while holding Alt key.

v. Open Format Chart Task Pane with Ctrl + 1

1. When you open Format Chart Task Pane you can click on Icons at top of pane to find different Formatting Options, like in this picture:



vi. You can link the Chart Title to a cell:

1. Click on Chart Label and make sure it shows a solid line (not a dashed line)
2. Click in Formula Bar
3. Type Equal sign
4. Click on cell in worksheet that has label
5. Hit Enter

## 7) Page Setup:

- i. Keyboard = Alt, P, S, P
- ii. We looked at:
  1. Page tab
  2. Margins tab
  3. Header/Footer tab

## 8) New Keyboard Shortcut:

- i. Ctrl + 1 = Format Cells dialog box
- ii. Snap Object to grid in sheet use: Click and Alt
- iii. Open Format Chart Element Task Pane: Click on Chart Element and use: Ctrl + 1
- iv. Reminders of ones we have already learned:
  1. Ctrl + \* = Highlight current Table (Current Region)
  2. Page Setup dialog box = Alt, P, S, P