

# Office 2016– Excel Basics 15

## Video/Class Project #27

### Excel Basics 15: Excel Table Feature to Create Dynamic Ranges for VLOOKUP, PivotTables, & more!

**Goal in video # 15:** Learn the basics of the Excel Table Feature so we have Data Sets with Dynamic Ranges.

Topics Covered in Video:

#### 1) Excel Table Feature

- i. We use Excel Tables so that when we add new rows or columns to our Excel Table, the formulas and PivotTables and other objects that are pointing to the ranges in the Excel Table will automatically update.

#### 2) Requirements for an Excel Table:

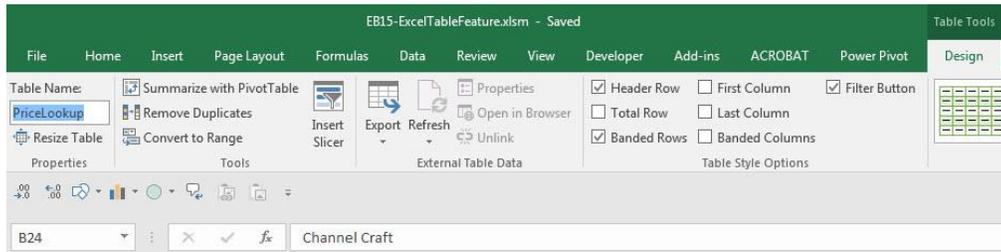
- i. You must have a Proper Data Set (Field Names in 1st Row, 2) Records in Row, 3) Empty Cells All the way around)
- ii. Click in one cell in Proper Data Set
- iii. Click on Table button in Table group in Insert Ribbon Tab (or just use keyboard: Ctrl + T)
  1. Here is a picture of what we did in class:

23	Product	Supplier	Cost	Retail Price		Product	Retail Price
24	Flying Eagle	Channel Craft	12.37	19.95			
25	V Rang	Colorado	12.89	18.95			
26	Quad	Gel Boom	21.54	43.95			
27	Bellen	Gel Boom	11.59	26.95			
28	Carlota	Gel Boom	17.33	27.95			
29							
30							



- iv. Name Table in Table Tools Design Ribbon Tab, Properties group. You can NOT use spaces in the Table Name.

1. Here is a picture:



23	Product	Supplier	Cost	Retail Price		Product
24	Flying Eagle	Channel Craft	12.37	19.95		Aspen
25	V Rang	Colorado	12.89	18.95		
26	Quad	Gel Boom	21.54	43.95		
27	Bellen	Gel Boom	11.59	26.95		
28	Carlota	Gel Boom	17.33	27.95		
29	Aspen	Colorado	11	22.95		
30						

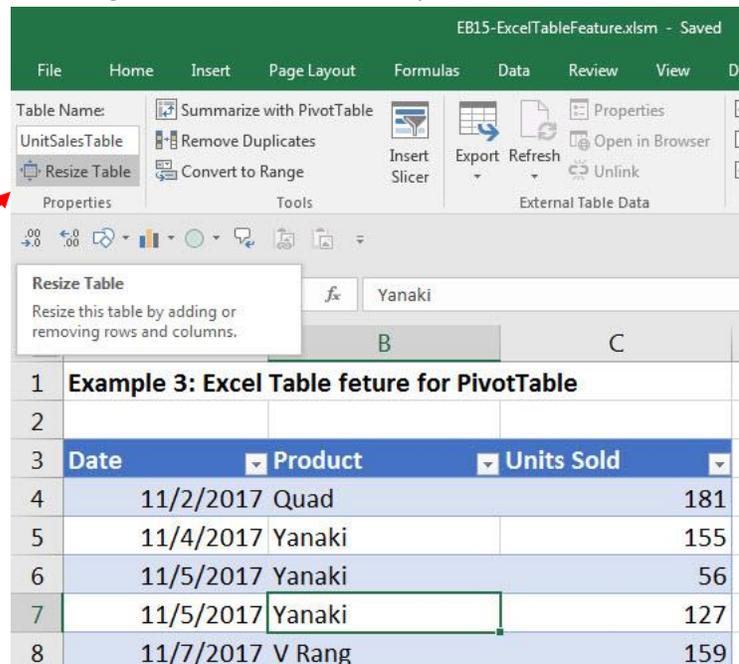
Always name your Excel Table. You cannot have a space in an Excel Table Name

3) Advantages of Excel Tables:

- i. When you add new records or columns, Formulas, Data Validation, Charts, PivotTables and other features that are pointing to table will update automatically
  1. This means that our Formulas, Data Validation and PivotTables will see any new data we add to our Excel Table.
- ii. In Formulas we can use Table Formula Nomenclature: Table Names and then Field Names in Square Brackets

4) Add new records to Excel Table:

- i. Methods:
  1. Click in last cell in last record and hit Tab.
  2. Paste Records in the first row below the Excel Table
    - i. On most computers the Excel Table feature will automatically incorporate the new records into the Excel Table.
  3. When you paste your records below the Excel Table, if the records do not automatically become incorporated into the Excel Table, use the “Resize Table” button in the Properties group in the Table Tools Design Ribbon Tab, like in this picture:



Click Resize Table button and then use dialog box to highlight new records.

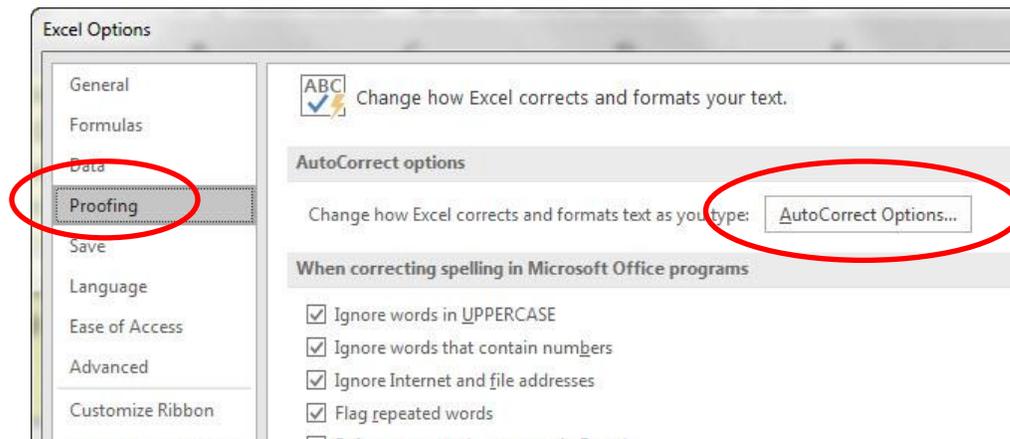


5) If your computer does not automatically incorporate new rows or columns into table, here are the steps to change the default settings:

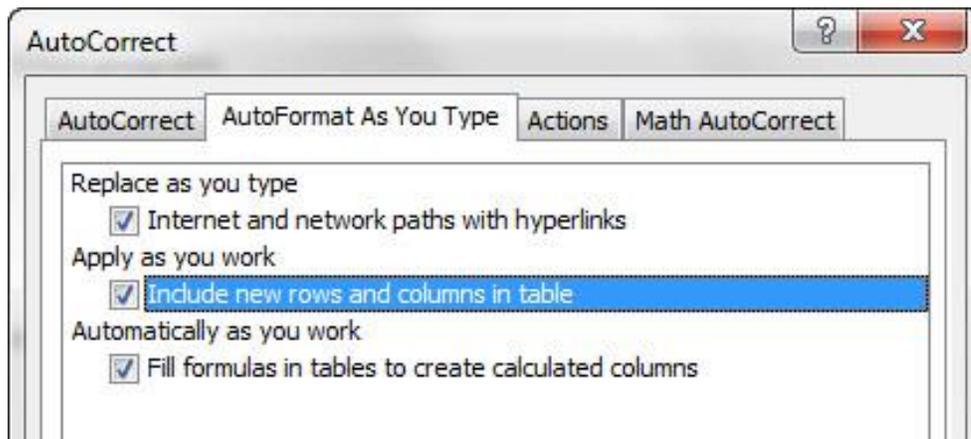
i. Go to File Menu, and then to Options: like in this picture:



ii. On left click on "Proofing", Then on Right click "AutoCorrect Options" button, like in this picture:



iii. Make sure that "Include new rows and columns in table" is checked, like here:



- 6) Calculating Net Revenue when you are given a Discount Decimal or Percentage
- i. If you charge a customer a Total Revenue of \$527.40 and you give the customer a 0.25 or 25% Discount, this means that for every one dollar you are giving the customer a \$0.25 discount and asking them to pay \$0.75 for every dollar that they owe.
  - ii. To calculate the discount, you can make this calculation:  
 $\$527.40 * 0.25 = \$131.85 = \text{Amount of Discount}$
  - iii. To calculate the Net Revenue that you earn, you can make this calculation:  
 Total Revenue - Amount of Discount = Net Revenue  
 or  
 $\$527.40 - \$131.85 = \text{Net Revenue} = \$395.55$
  - iv. Rather than make this calculation in a two step process, you can do it in a one-step process by subtracting the Decimal Discount from one and multiply it by the Total Revenue, like this:  
 $\$527.40 * (1 - 0.25) = \text{Net Revenue} = \$395.55$
  - v. Here is a picture of this calculation:

<b><u>Variables:</u></b>
Discount Decimal or Percentage = 0.25 or 25.00%
Total Revenue = \$527
<b><u>Formulas:</u></b>
Amount of Discount = Total Revenue * Discount Decimal
$\$527.40 * 0.25 = \$131.85 = \text{Amount of Discount}$
Net Revenue = Total Revenue - Amount of Discount
$\$527.40 - \$131.85 = \text{Net Revenue} = \$395.55$
Net Revenue = (1-Decimal Discount) * Total Revenue
$\$527.40 * (1 - 0.25) = = \text{Net Revenue} = \$395.55$

## New Keyboards:

- 1) Ctrl + T →> will convert a Proper Data Set to an Excel Table.