Advanced Excel 2013: Organizing Data
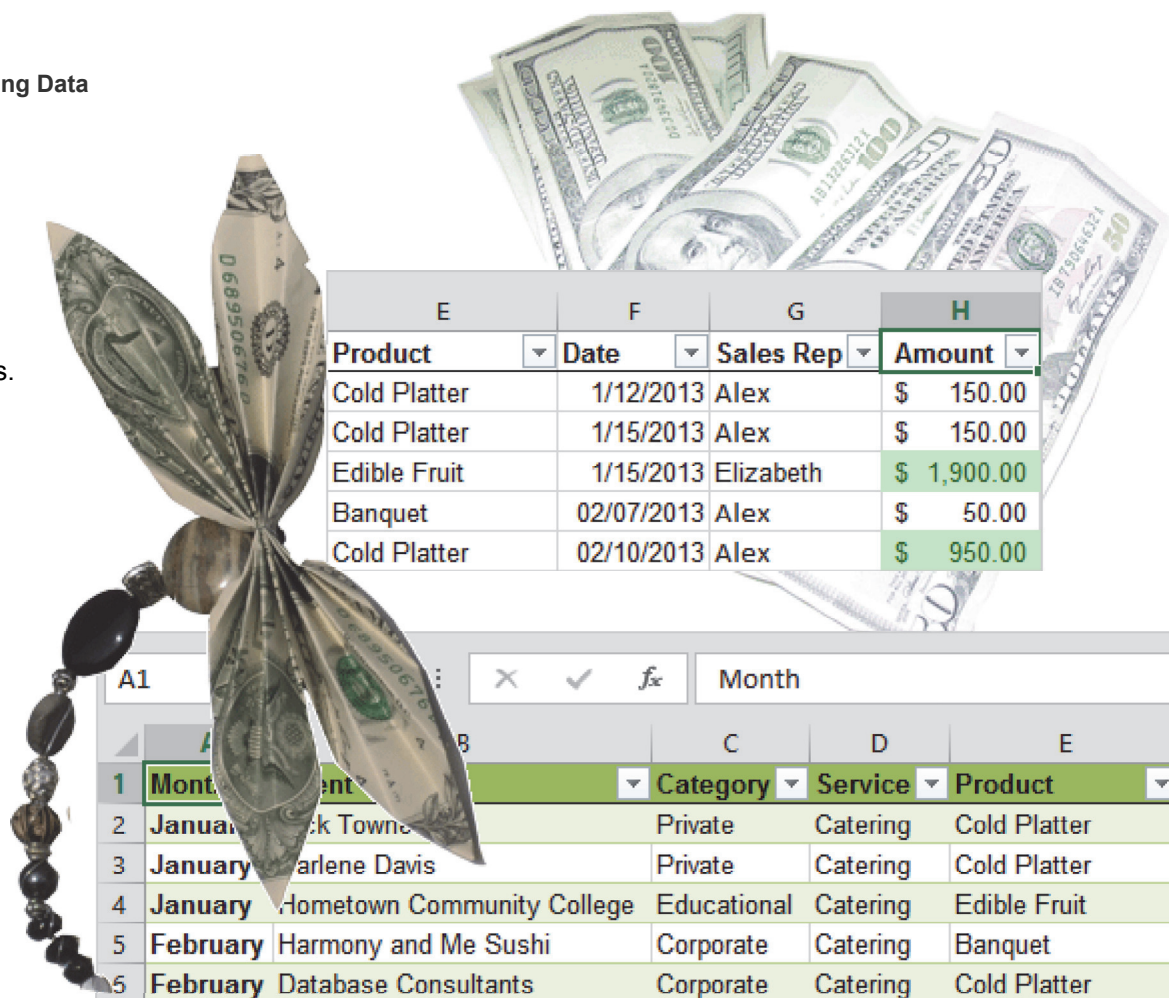
It Works for Me

Advanced Excel Objectives
In this lesson, you will learn how to:
1. Create a Table.
2. Identify the Header Row with the Table Tools.
3. Locate the Quick Style Formats.
4. Use the Table Tools to add a Total Row.
5. Convert Tables to Text.
6. Convert Text to Tables.

Product	▼	Date	▼	Sales Rep	▼	Amount	▼
Cold Platter		1/12/2013		Alex		$ 150.00	
Cold Platter		1/15/2013		Alex		$ 150.00	
Edible Fruit		1/15/2013		Elizabeth		$ 1,900.00	
Banquet		02/07/2013		Alex		$ 50.00	
Cold Platter		02/10/2013		Alex		$ 950.00	

A1 ✕ ✓ *fx* Month

	Month	ent	▼	Category	▼	Service	▼	Product	▼
1	Mont	ent		Category		Service		Product	
2	Januar	k Town		Private		Catering		Cold Platter	
3	January	arlene Davis		Private		Catering		Cold Platter	
4	January	Hometown Community College		Educational		Catering		Edible Fruit	
5	February	Harmony and Me Sushi		Corporate		Catering		Banquet	
5	February	Database Consultants		Corporate		Catering		Cold Platter	

Lesson 1: It Works for Me

1. Readings

Read Lesson 1 in the Advanced Excel guide, page 11-44.

Project

A spreadsheet that works with Tables in Excel. This lesson shows how to present data visually, format data as a Table and calculate the Totals.

Downloads

Sales 2013 Original Data.xlsx
Student Records.xlsx

2. Practice

Complete the Practice Activity on page 45.

3. Assessment
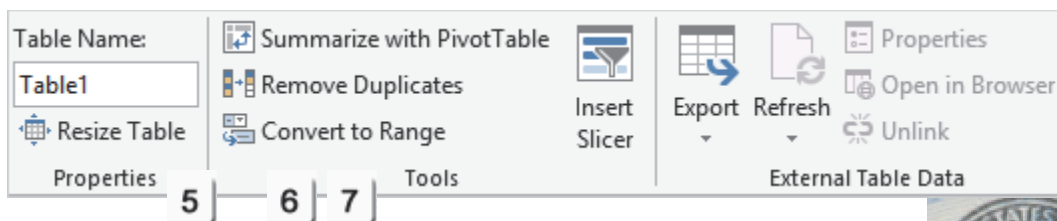
Review the Test questions on page 46.

Table Tools

Table Name:	Summarize with PivotTable			Properties
Table1	Remove Duplicates	Insert Slicer	Export Refresh	Open in Browser
Resize Table	Convert to Range			Unlink
Properties	Tools		External Table Data	

5 6 7

Table Tools

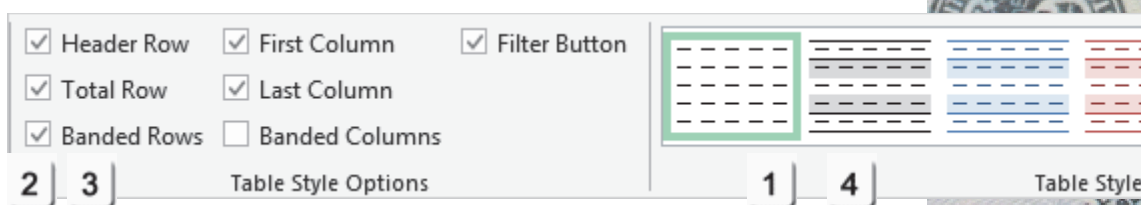| ☑ Header Row	☑ First Column	☑ Filter Button
☑ Total Row	☑ Last Column	
☑ Banded Rows	☐ Banded Columns	

2 3 Table Style Options 1 4 Table Styles

Menu Maps

This lesson demonstrates options on the **Table Tools** Ribbon.
1. Table Tools->Design ->Table Styles, page 24
2. Table Tools->Design ->Table Style Options->Header Row, page 25
3. Table Tools->Design ->Table Style Options -> Total Row, page 27
4. Table Tools-> Design ->Table Styles -> Clear, page 30
5. Table Tools-> Design ->Properties-> Resize Table, page 41
6. Table Tools-> Design ->Tools-> Remove Duplicates, page 42
7. Table Tools-> Design ->Tools-> Convert to Range, page 44

From the **Home** Ribbon
Home -> Conditional Formatting, page 31

Take
One

Organizing Data with Tables

One of the unique functions of a computer is to organize information into Rows and Columns. Microsoft Excel does Rows and Columns: specifically **Tables**. Tables can be little reference lists that are named and used in a formula. One good example is a Lookup table. By definition, vLookup has the data in Columns (vertical). Hlookup has the data in Rows (horizontal). The Advanced Guide to Excel begins with **Tables** and **Table Tools**.

Start Microsoft Excel. When the Welcome screen appears, open a new, blank workbook. **What do you see** from the top of the screen? Is there a **Home** Ribbon? And the **Insert**, **Page Layout, Formulas, Data. Review and View** Ribbons as well? Yes. Then you are ready to go.

Take One

File -> Open
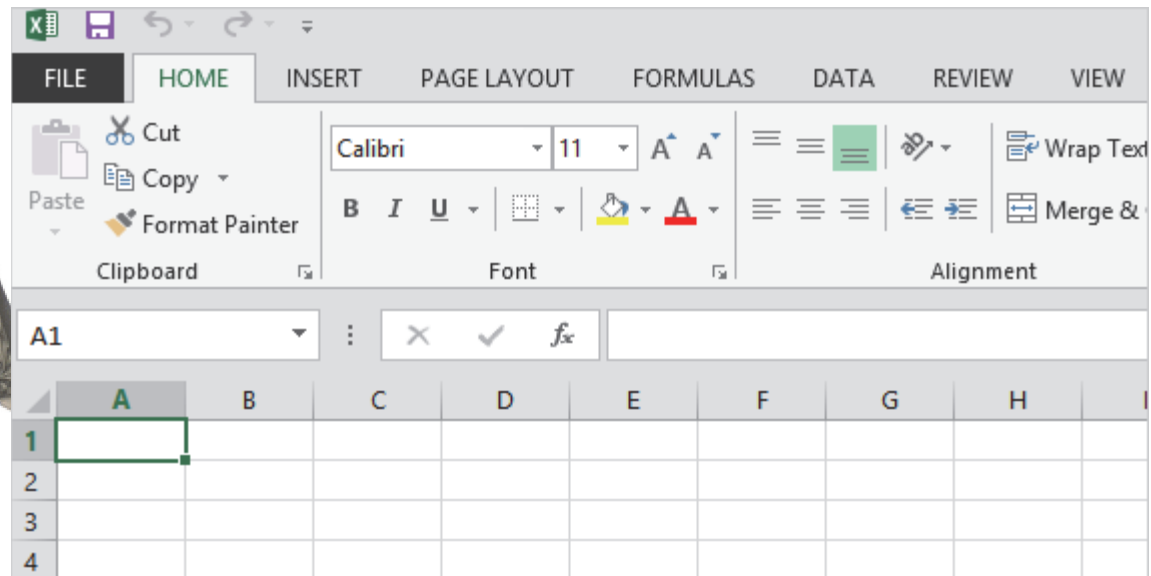
Before You Begin

The purpose of this lesson is to investigate the **Table** Options in Microsoft Excel. You can use a spreadsheet that you created or download a sample spreadsheet if you wish.

1. Try This: Open a Sample Spreadsheet
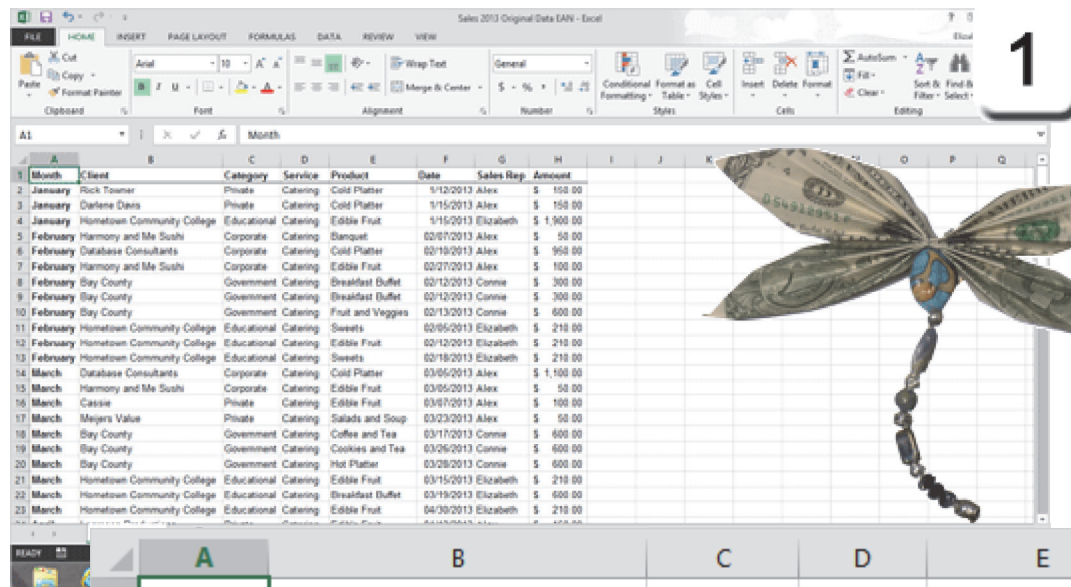Open a sample spreadsheet:
Sales 2013 Original Data.xlsx
Go to the **Original Data** sheet.

What Do You See? This sheet shows the product sales for Charlotte' Website. The first row is BOLD: It is the Header Row. There are many rows of data.

So far, so good. Keep going...

Memo to Self: You do not have to MATCH the numbers shown on these pages. It is more important that you begin with some data and understand the options.

	A	B	C	D	E
1	**Month**	**Client**	**Category**	**Service**	**Product**
2	**January**	Rick Towner	Private	Catering	Cold Platter
3	**January**	Darlene Davis	Private	Catering	Cold Platter
4	**January**	Hometown Community College	Educational	Catering	Edible Fruit
5	**February**	Harmony and Me Sushi	Corporate	Catering	Banquet
6	**February**	Database Consultants	Corporate	Catering	Cold Platter
7	**February**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
8	**February**	Bay County	Government	Catering	Breakfast Buffet

Home -> Cells->Format->Move or Copy Sheet

Still Before You Begin
A good administrator makes a COPY of the data before manipulating it.

2. Try This: Copy the Spreadsheet
Go to **Home -> Cells -> Format.**
Click on **Move or Copy Sheet.**
A new sheet will be inserted.

3. Try This: Rename the Worksheet
Click on the **Original Data (2)** tab.
Go to **Home -> Cells -> Format.**
Click on **Rename Sheet.**
The Name in the tab should be highlighted. Type: Data Tables.
Click ENTER on the keyboard.

Keep going...

Memo to Self: You can achieve the same results by right-clicking the tab, as shown.

12	February	Hometown Community College	Educational	Catering	Edible Fruit
13	February	Hometown Commu		al Catering	Sweets
14	March	Database Consulta		Catering	Cold Platter
15	March	Harmony and Me S		Catering	Edible Fruit
16	March	Cassie		Catering	Edible Fruit
17	March	Meijers Value		Catering	Salads and Soup
18	March	Bay County		nt Catering	Coffee and Tea
19	March	Bay County		nt Catering	Cookies and Tea
20	March	Bay County		nt Catering	Hot Platter
21	March	Hometown Commu		al Catering	Edible Fruit
22	March	Hometown Commu		al Catering	Breakfast Buffet
23	March	Hometown Commu		al Catering	Edible Fruit

Right-click menu: Insert..., Delete, Rename, Move or Copy..., View Code, Protect Sheet..., Tab Color ▶, Hide, Unhide..., Select All Sheets

Original Data

2

18	February	Bay County		Government	Catering	Breakfast Buffet
19	February	Bay County		Government	Catering	Breakfast Buffet
20	February	Bay County		Government	Catering	Fruit and Veg
21	February	Hometown Community College	Educational	Catering	Sweets
22	February	Hometown Community College	Educational	Catering	Edible Fruit
23	February	Hometown Community College	Educational	Catering	Sweets

Data Tables | Original Data

3

Exam 77-420 Microsoft Excel 2013
1. Create and Manage Worksheets and Workbooks
1.1 Create Worksheets and Workbooks: Copy and Move Worksheets

Take One

Sort & Filter: A to Z

So, here is a list of clients that bought products from Charlotte's Website. The fields in the Header Row include the name, date, product and amount for the sales.

4. Try This: Sort & Filter the Data
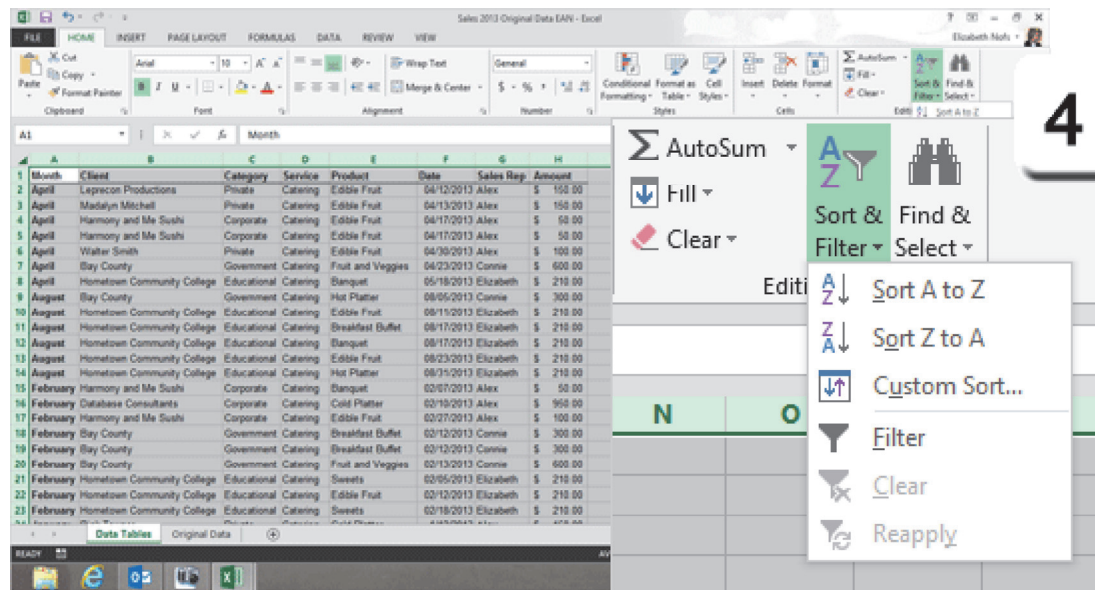Select the entire spreadsheet.
Go to **Home -> Editing->Sort & Filter.**
Select: **Sort A-Z**.

What Do You See? The data is sorted by the first Column. By default, the data is sorted alphabetically. So, the names of the months go from April (A) through September (S)....that's not what most people have in mind.

Try Again: Undo the last step and keep going...

	A	B	C	D	E
1	**Month**	**Client**	**Category**	**Service**	**Product**
2	**April**	Leprecon Productions	Private	Catering	Edible Fruit
3	**April**	Madalyn Mitchell	Private	Catering	Edible Fruit
4	**April**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
5	**April**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
6	**April**	Walter Smith	Private	Catering	Edible Fruit

Exam 77-420 Microsoft Excel 2013
2. Create Cells and Ranges
2.3 Order and Group Cells and Ranges: Sort

Take One

Data: Sort Order

There is another kind of **Sort** that can be found on the **Data** Ribbon. This Sort lets you use one or several criteria. The criteria comes from the names in the Header Row.

5. Try it: Data Sort
Select the whole spreadsheet.
Go to **Data -> Sort & Filter ->Sort.**

What Do You See? The options include:
Add Level
Delete Level
Copy Level
Options
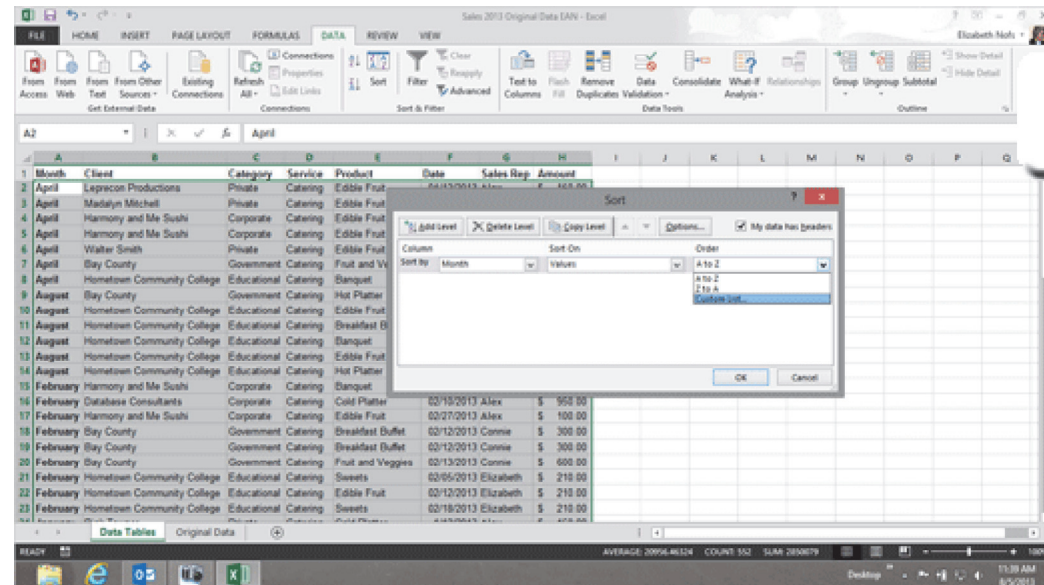There should be a check mark for:
My data has headers.

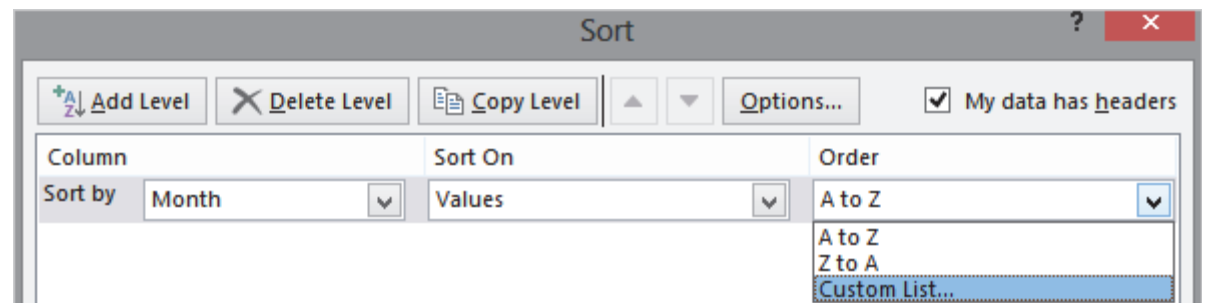**Try This, Too: Edit the Sort Options**
Sort by: Month
Sort On: Values
Order: Custom List (Remember, A to Z didn't work for Months.) Keep going...

Data -> Sort & Filter ->Sort

Exam 77-420 Microsoft Excel 2013
2. Create Cells and Ranges
2.3 Order and Group Cells and Ranges: Sort Order

Take One

Data: Custom Sort Criteria

What Do You See? Spreadsheets are used for financials and financials are recorded by date. Spreadsheets like Excel recognize that Months are sorted in calendar order, not alphabetically. Here are the steps:

6. Try it: Choose a Custom List
Select the spreadsheet.
Go to **Data -> Sort & Filter ->Sort.**
Go to **Order-> Custom List.**
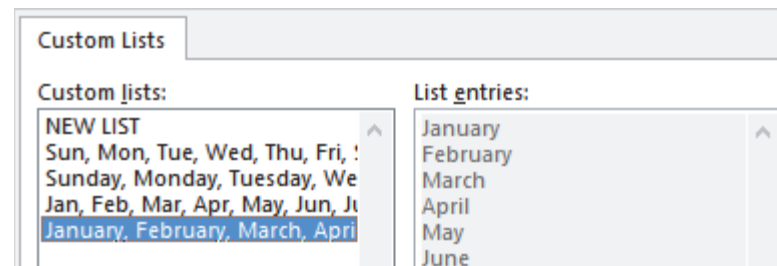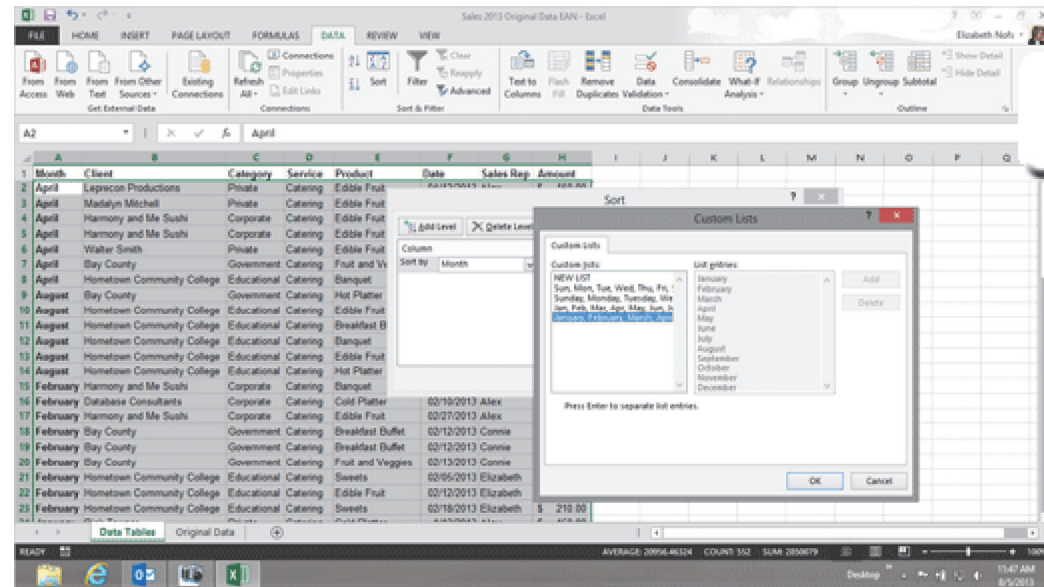Select: January, February, March, April...
This is the **List** that matches our data.

Click **OK**, then **OK** again to save and close both windows. The entire list has been sorted. Not bad, huh?

Keep going...

The Computer Mama sez: In the 1980s, Fr. Paul wanted to sort 550 families on a PDP 11 computer. It took most of the night. Computers are faster now, aren't they?

Exam 77-420 Microsoft Excel 2013
2. Create Cells and Ranges
2.3 Order and Group Cells and Ranges: Custom Sort Lists

Take One

Data: Sort by Multiple Criteria

Sometimes, it is useful to **Sort** the information by more than one criteria. Say you wanted to see how much each sales rep sold by month.

7. Try it: Sort by Multiple Criteria
Select the entire spreadsheet.
Go to **Data -> Sort & Filter ->Sort.**
The **Order** is **Custom:** January, February, March

Click on **Add Level** to add a second Row.
Choose: Sales Rep
The Order is A to Z.

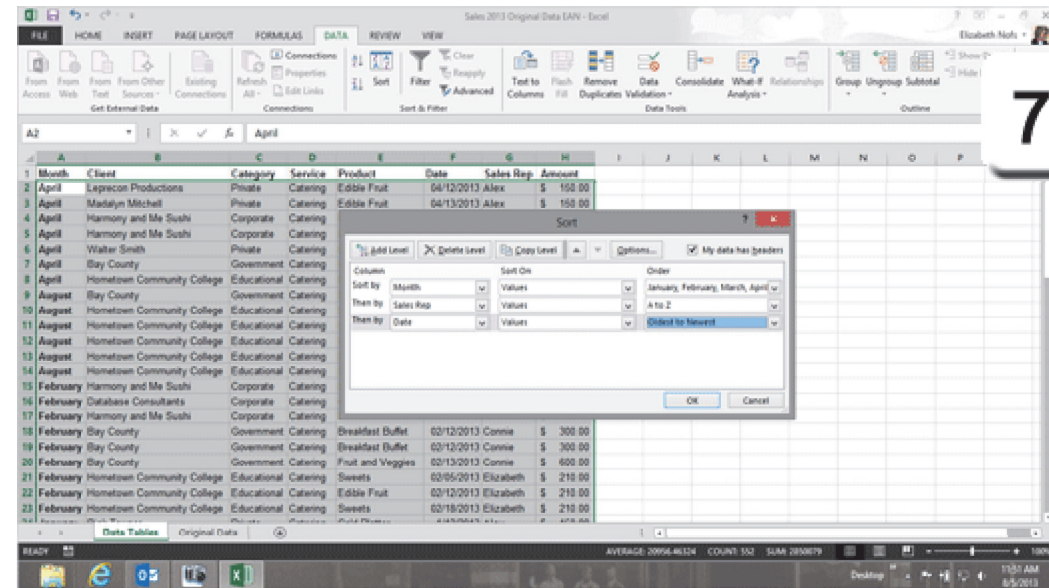Click on **Add Level** again to add another Row.
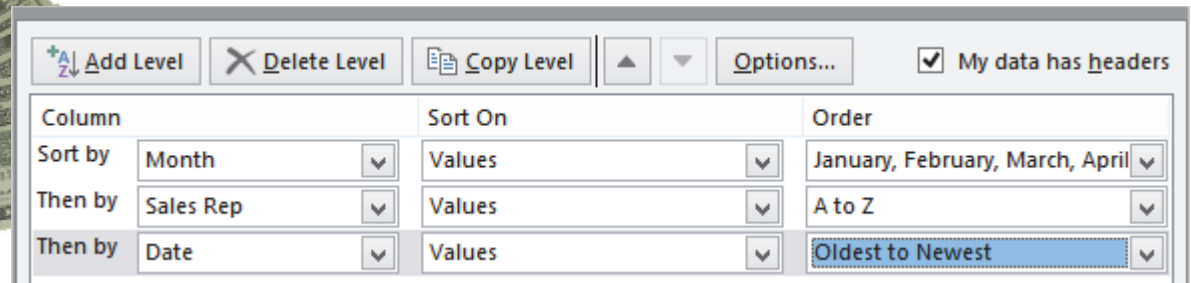Choose: Date
The Order is Oldest to Newest.
Click **OK**.

Data -> Sort & Filter ->Sort-> Add Level

7

Column		Sort On		Order	
Sort by	Month ∨	Values ∨		January, February, March, April ∨	
Then by	Sales Rep ∨	Values ∨		A to Z ∨	
Then by	Date ∨	Values ∨		Oldest to Newest ∨	

Add Level   Delete Level   Copy Level   ▲ ▼   Options...   ✓ My data has headers

Exam 77-420 Microsoft Excel 2013
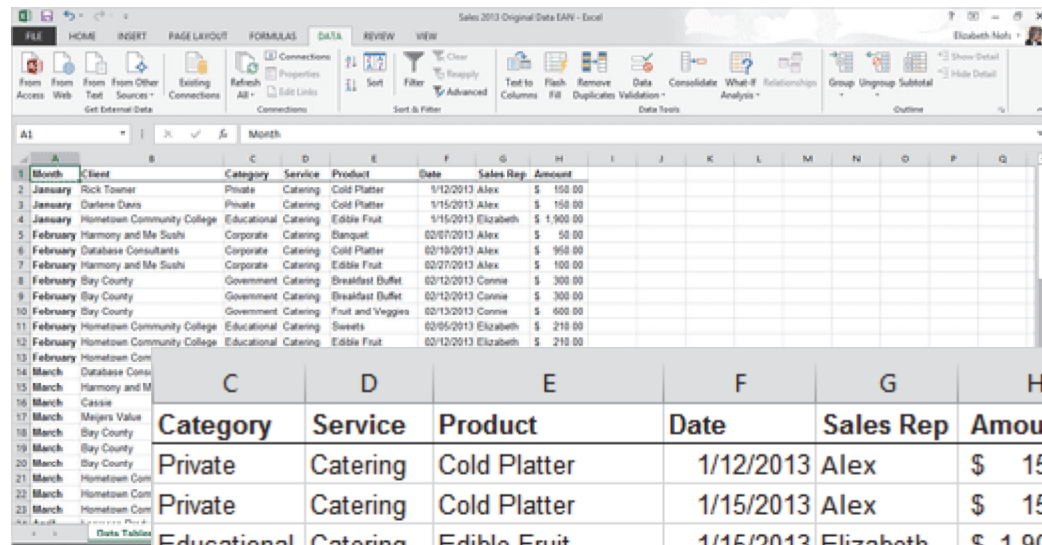2. Create Cells and Ranges
2.3 Order and Group Cells and Ranges: Sort by Multiple Criteria

Summary of List Options

What Do You See? The information was sorted to our criteria. However, it is very difficult to read and interpret the data. It all looks the same. This looks like a list with details, details and still more details.

A **Table** is a easy to format and filter. You can also use a Table to calculate numbers in a **Total Row**. Interested? OK, start here...

Category	Service	Product	Date	Sales Rep	Amount
Private	Catering	Cold Platter	1/12/2013	Alex	$ 150.00
Private	Catering	Cold Platter	1/15/2013	Alex	$ 150.00
Educational	Catering	Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
Corporate	Catering	Banquet	02/07/2013	Alex	$ 50.00
Corporate	Catering	Cold Platter	02/10/2013	Alex	$ 950.00
Corporate	Catering	Edible Fruit	02/27/2013	Alex	$ 100.00
Government	Catering	Breakfast Buffet	02/12/2013	Connie	$ 300.00
Government	Catering	Breakfast Buffet	02/12/2013	Connie	$ 300.00
Government	Catering	Fruit and Veggies	02/13/2013	Connie	$ 600.00
Educational	Catering	Sweets	02/05/2013	Elizabeth	$ 210.00
Educational	Catering	Edible Fruit	02/12/2013	Elizabeth	$ 210.00

Format as Table

Rows and Columns can be organized into a **Table**. A Table has Properties that can be formatted much more easily than a **List**. Here are the steps to convert a List into a Table.

1. Try It: Format a Table
Select Cell A1.
Go to **Home->Styles.**
Click on **Format as Table**.
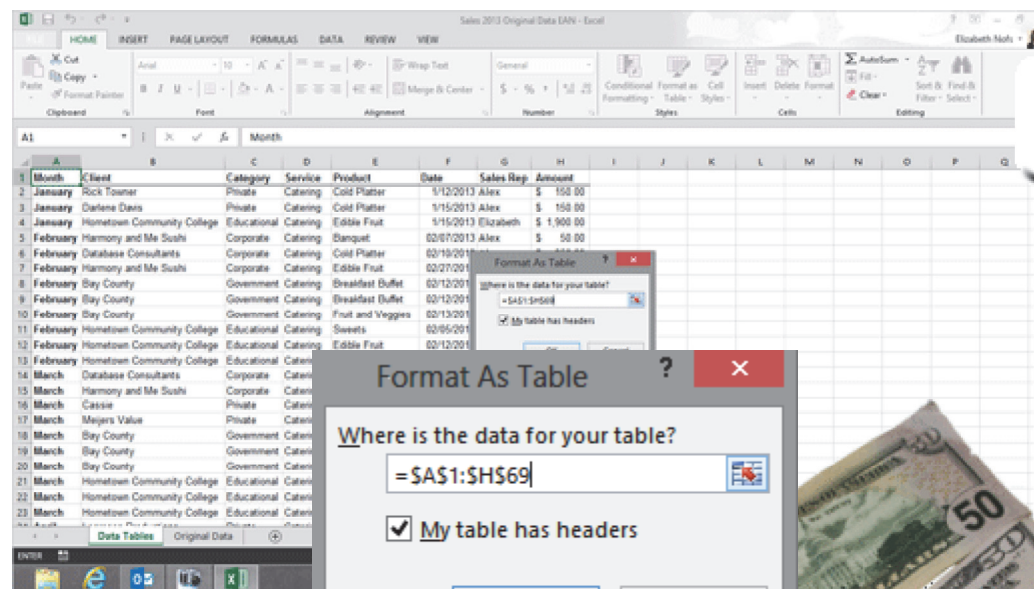Choose: Table Style Medium 4.

Where is the data for your table?
You will be prompted to select the **Range** for you data. In the example on this page, Excel selected all of the Cells from $A$1:$H$69. The Range is Absolute.

What Else Do You See? There should be a check mark for My table has headers.

Click **OK**.

Keep going, please...

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.1 Create a Table: Create a Table

Take One

Table Tools->Design

Hello, Table!

2. What Do You See? The data has been formatted as a Table. The Header Row is Bold and it has little filters: Drop-down option lists.

The rows of customer information have been formatted to make the data easier to read.

What Else Do You See? The **Table Tools** should be available.

Keep going...

Where Have You Seen This Before? Microsoft Word has Table Tools, as well. However, Word has two Ribbons: Design and Layout. Microsoft Excel already recognizes Rows and Columns, whereas Word has to define them with the Layout Ribbon.

TABLE TOOLS

VIEW   DESIGN

☑ Header Row   ☐ First Column   ☑ Filter Button
☐ Total Row   ☐ Last Column
☑ Banded Rows   ☐ Banded Columns

Table Style Options

A1		⋮	✕	✓	*fx*	Month	

	A	B	C	D	E
1	**Month** ▾	**Client** ▾	**Category** ▾	**Service** ▾	**Product** ▾
2	**January**	Rick Towner	Private	Catering	Cold Platter
3	**January**	Darlene Davis	Private	Catering	Cold Platter
4	**January**	Hometown Community College	Educational	Catering	Edible Fruit
5	**February**	Harmony and Me Sushi	Corporate	Catering	Banquet
6	**February**	Database Consultants	Corporate	Catering	Cold Platter

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.1 Create a Table: Create a Table

Take One

Use the Header Row

You can use the Header Row to **Sort** and **Filter** the data.

3. Try It: Use the Header Row Filters
Select the **Sales Rep** Filter.
Sort the Column A to Z.

Try This, Too: Filter the Data
Filter the Sales Reps: Connie and Niki.

What Do You See? Only the Rows where Connie or Niki are the Sales Reps are shown. The other rows are hidden.

What Else Do You See? This Table has **Banded Rows**. Does the formatting update when you choose different **Filters**?

Where Have You Seen This Before? The Header Row is used to create Mail Merge Fields in Microsoft Word, too.

Take One

Table Tools->Design ->Table Styles

4

Table Styles

Formatting makes the data easier to read and understand. Microsoft Excel has a library of **Table Styles**. The Styles format the Headers as well as the Columns and Rows.

Before You Begin: Please click anywhere on the Table to select it. The **Table Tools** should be available.

4. Try It: Apply a Table Style
Go to **Table Tools->Design**.
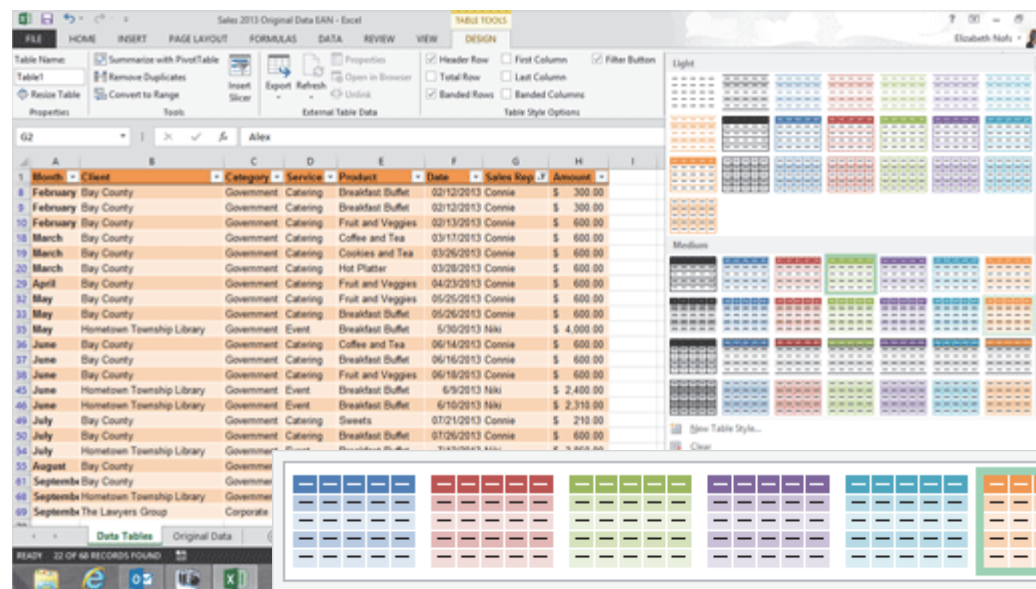Go to **Table Styles**.
Select a **Quick Style** from the library.

What Do You See? The Table Styles are grouped by Light, Medium and Dark.

What Else Do You See? The Sales Rep data is Filtered. There is a little funnel symbol on the Field.

Keep going...

Table Styles

E	F	G	H
Product ▼	**Date** ▼	**Sales Rep** ▼	**Amount** ▼
Breakfast Buffet	02/12/2013	Connie	$ 300.00
Breakfast Buffet	02/12/2013	Connie	$ 300.00
Fruit and Veggies	02/13/2013	Connie	$ 600.00
Coffee and Tea	03/17/2013	Connie	$ 600.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Apply Styles to Tables

Table Style Options

You can use the **Table Style Options** to display the Header Row, Total Row and formatting if you wish.

5. Try It: Add or Remove the Header
Go to **Table Tools-> Design**.
Look in the **Table Style Options**.
Uncheck the **Header Row**.

What Do You See? When you turn off the Header Row, the first Row becomes blank. You may also see an error message that warns that turning off the Header Row will change the answer in the Total Row. Yes, it will. The Filter and the Filter button on Sales Rep will be removed when you turn off the Header Row so you should see all four Sales Reps shown in the Total.

Trust But Verify: Turn the Header Row back on, please. The Header and the Filters should be available again.

Memo to Self: The Header Row Field Names are saved in the Table Properties.

Table Tools->Design ->Table Style Options

	Header Row		First Column		Filter Button
	Total Row		Last Column		
✓	Banded Rows		Banded Columns		

Table Style Options

5
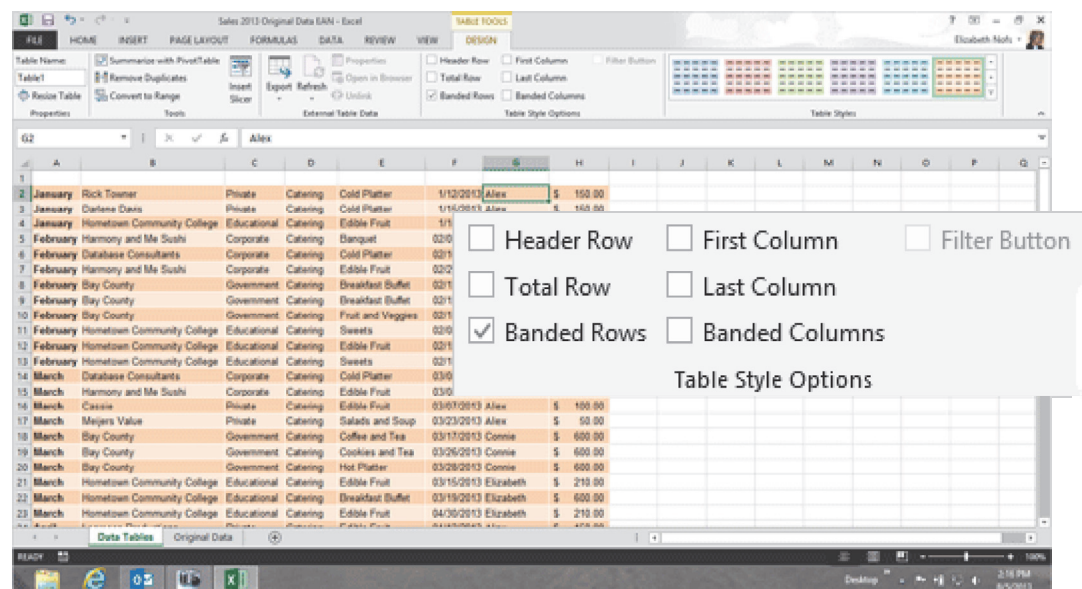
E	F	G	H
Cold Platter	1/12/2013	Alex	$ 150.00
Cold Platter	1/15/2013	Alex	$ 150.00
Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
Banquet	02/07/2013	Alex	$ 50.00
Cold Platter	02/10/2013	Alex	$ 950.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Apply Table Style Options (Header Row)

Take
One

Table Style Options

Color is an effective method to indicate which data should get the most attention.

Before You Begin: Please click anywhere on the Table to select it. The **Table Tools** should be available. The **Filter** is off: All of the Sales Reps are selected.

6. Try It: Edit the Table Style Options
Go to **Table Tools->Design.**
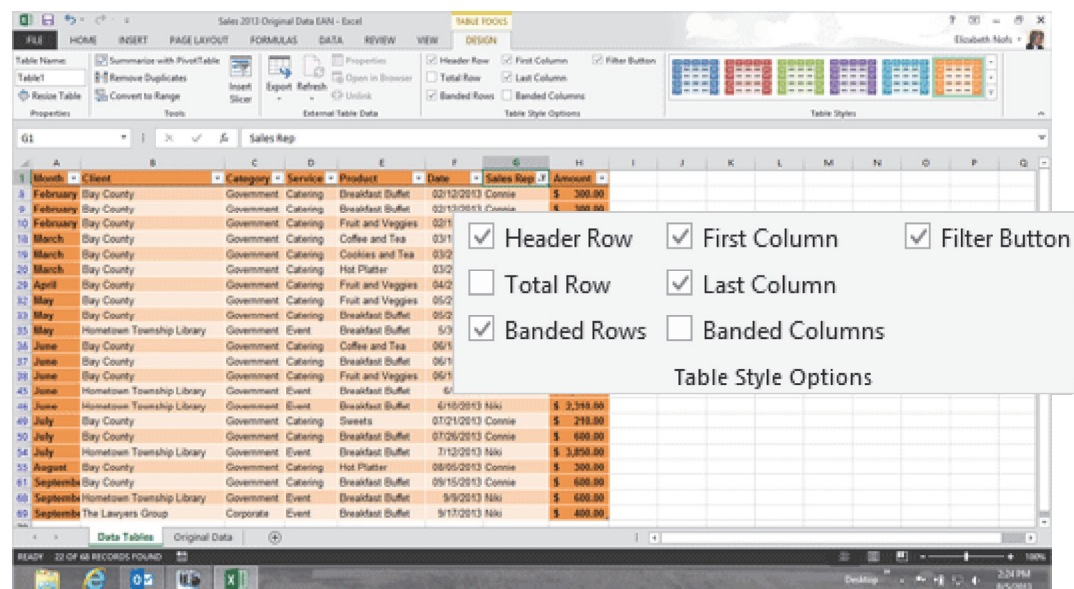Go to **Table Style Options**.
Select: Banded Rows.
Select: First Column and Last Column.

What Do You See? The Table Styles emphasized the first and last columns by formatting the Cells Bold.

The **Banded Rows** make it easier to read across a Row.

You can keep going, there's more...

Table Tools->Design ->Table Style Options

	E	F	G	H
	Product ▼	Date ▼	Sales Rep ▼	Amount ▼
	Cold Platter	1/12/2013	Alex	$ 150.00
	Cold Platter	1/15/2013	Alex	$ 150.00
	Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
	Banquet	02/07/2013	Alex	$ 50.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Banded Rows and Columns

Take One

Table Tools->Design ->Table Style Options -> Total Row

Calculate the Totals

Adding a **Total Row** to the Table is as simple as checking the option.

Before You Begin: Click on the Table. The Table Tools should be available.

7. Try It: Add a Total Row
Go to **Table Tools->Design.**
Go to **Table Style Options**.
Select: **Total Row**.

What Do You See? By default, the Total Row will be added to the bottom of the Table. Microsoft Excel will insert a formula for your Total: $33,540.00.

Keep going, OK?
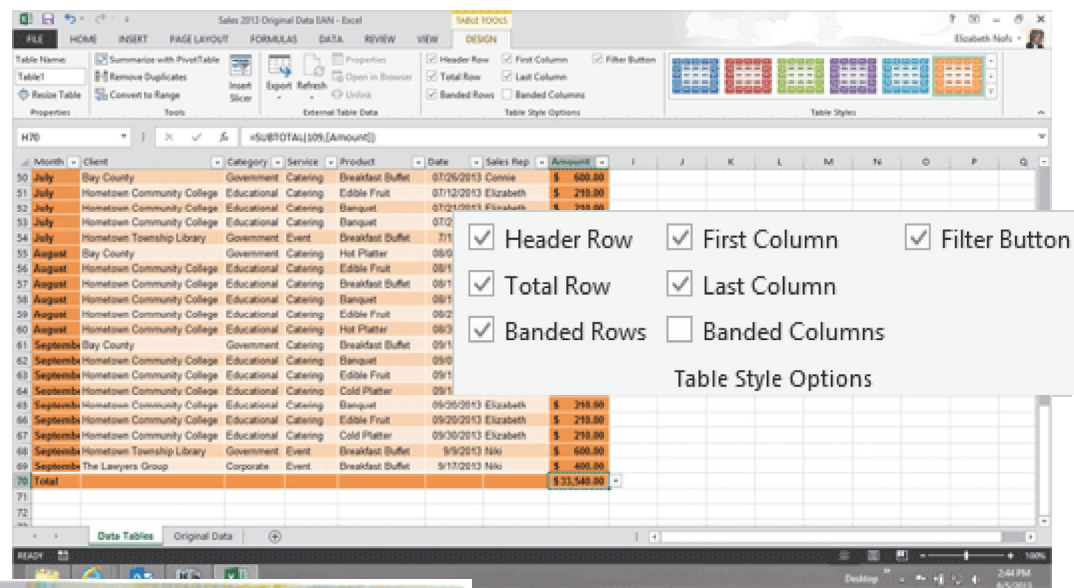
Edible Fruit	09/20/2013	Elizabeth	$ 210.00
Cold Platter	09/30/2013	Elizabeth	$ 210.00
Breakfast Buffet	9/9/2013	Niki	$ 600.00
Breakfast Buffet	9/17/2013	Niki	$ 400.00
			$33,540.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Insert a Total Row

HOME

Take One

Table Tools->Design ->Table Style Options -> Total Row

8

Edit the Total Row

Click on the Total number: It adds the Sum of the Amounts in this Column. You can change the operation from Sum to Average, Count, Max, Min or any of the options available in the extensive library.

8. Try It: Edit the Total Row Function
Select: Cell H70. In this example, it is the Cell with the Total formula.

Select a Function: Average.

What Do You See? The average price will be calculated.

Memo to Self: How would someone know that this is the Average, and not the Sum?
Labels, Labels, Labels.

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Edit the Total Row

Add to the Table

Is the Table flexible? Can you add another Row or Column to the Table without losing the formatting, totals calculations, or otherwise breaking it?
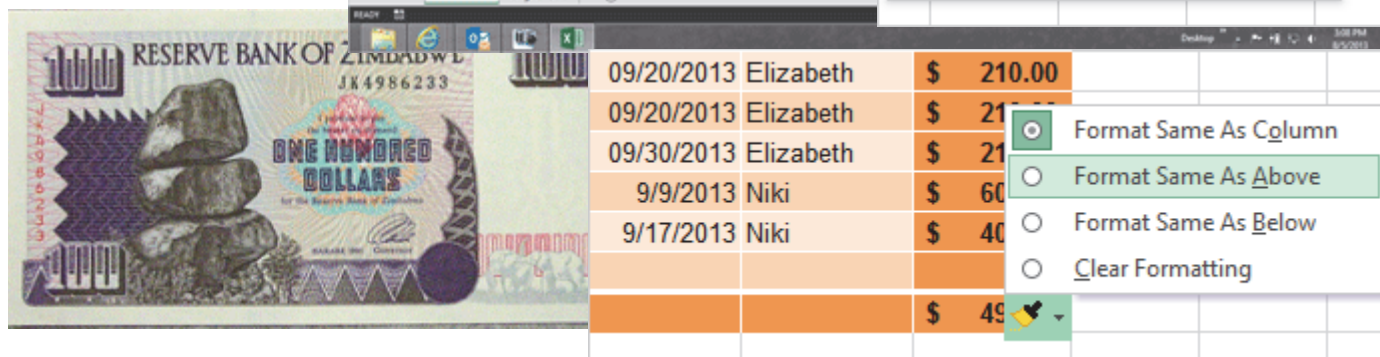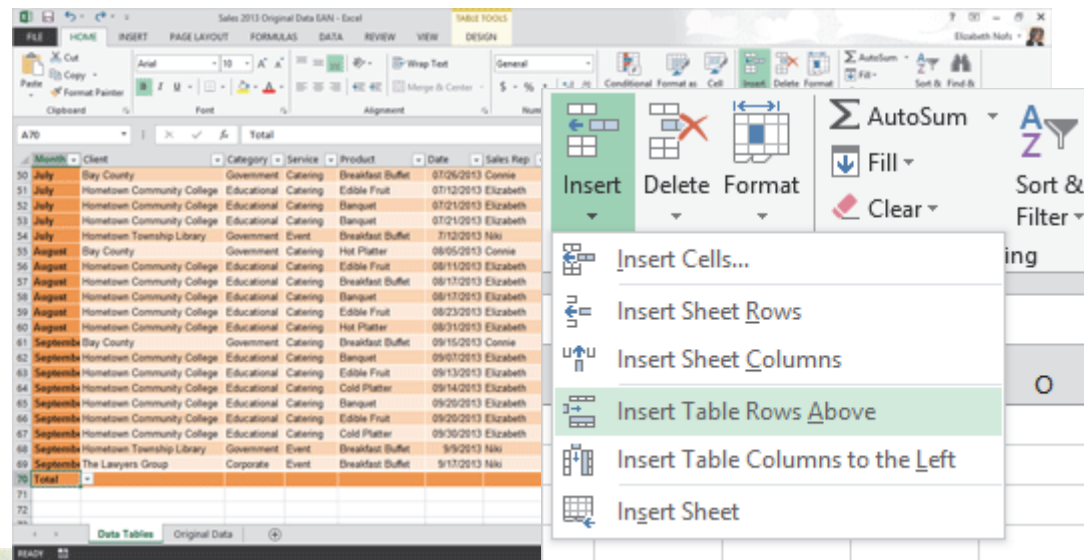
Try It: Add a Row
Select any Cell in the Total Row.
Go to **Home->Cells->Insert.**
Click on **Insert Table Rows Above**.

What Do You See? After you insert a new Row or Column, you may see a small format painter. You can click on the arrow and choose the formatting for the new Row.

Take One

Conditional Formatting

People have a hard time reading numbers. You can use color to show trends or make comparisons, say High, Medium, and Low.

Microsoft Excel calls this **Conditional Formatting**. The color depends on the condition, which you can choose.

Let's look at the options.

1. Try This: Clear the Styles
Click on the Table. The Table Tools should be available.
Go to **Table Tools->Design**.
Go to **Table Styles -> More->Clear.**

What Do You See? The Table Styles should be cleared.

Keep going...

Table Tools-> Design ->Table Styles -> More->Clear
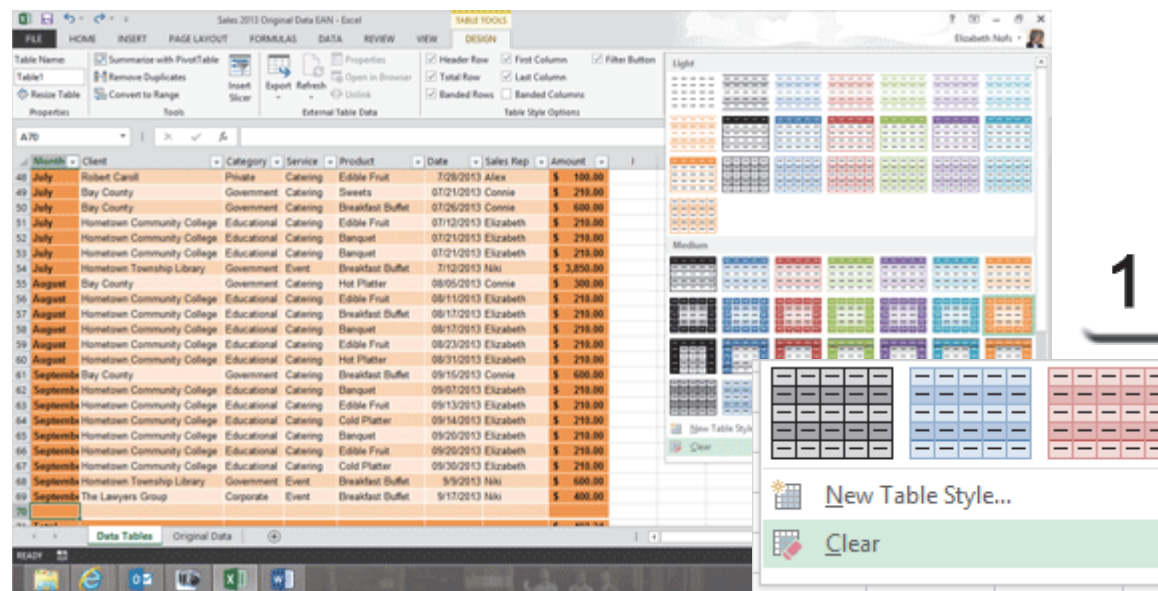
E	F	G	H
Product	Date	Sales Rep	Amount
Cold Platter	1/12/2013	Alex	$ 150.00
Cold Platter	1/15/2013	Alex	$ 150.00
Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
Banquet	02/07/2013	Alex	$ 50.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.2 Modify a Table: Remove Styles from Tables

Take One

Conditional Formats
Microsoft Excel has a library of **Conditional Formatting** including Data Bars, Color Sets and Icons.

Each of these formats is based on Conditional Formulas, or **Rules**. Let's start with a simple Rule: show me any amount that is above the average.

2. Try It: Above or Below Average?
Select Column H.
In the sample spreadsheet, this is the column with the Amount.

Go to **Home ->Styles.**
Go to **Conditional Formatting**.
Go to **Top/Bottom Rules**.
Select: **Above Average.**

Keep going, you will be prompted...

Home-> Styles-> Conditional Formatting -> Top/Bottom Rules

G	H	...	N
Sales Rep	Amount		
Alex	$ 150.00		
Alex	$ 150.00		
Elizabeth	$ 1,900.00		
Alex	$ 50.00		
Alex	$ 950.00		
Alex	$ 100.00		
Connie	$ 300.00		
Connie	$ 300.00		
Connie	$ 600.00		
Elizabeth	$ 210.00		
Elizabeth	$ 210.00		
Elizabeth	$ 210.00		

Highlight Cells Rules
Top/Bottom Rules
Data Bars
Color Scales
Icon Sets
New Rule...
Clear Rules
Manage Rules...

Top 10 Items...
Top 10 %...
Bottom 10 Items...
Bottom 10 %...
Above Average...
Below Average...
More Rules...

2

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Apply Rules

Advanced Microsoft Excel 2013   Page 31 of 330

Take One

Choose the Formatting

What Do You See? You will be prompted to select the colors when you select a **Top/Bottom** Rule.

In the example on this page, the suggested color is red, which isn't what people expect if the amount is ABOVE the Average.

Green means go: It is used to indicate financial success.

3. Try It: Format Cells
Select Green Fill with Dark Green Text, please. Click **OK**. The Amount in Column H will be formatted Green if it is Above Average.

E	F	G	H
Product ▼	**Date** ▼	**Sales Rep** ▼	**Amount** ▼
Cold Platter	1/12/2013	Alex	$ 150.00
Cold Platter	1/15/2013	Alex	$ 150.00
Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
Banquet	02/07/2013	Alex	$ 50.00
Cold Platter	02/10/2013	Alex	$ 950.00

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Apply Rules (Top/Bottom)

Take One

More Than One Rule

You can have more than one Conditional Rule formatting your data. In this illustration, there is one color for sales Above Average, and another for the sales Below Average.

4. Try It: Add Another Rule
Select Column H.
Go to **Home -> Styles.**
Go to **Conditional Formatting**.
Go to **Top/Bottom Rules.**
Select: **Below Average.**

Format Cells: You will be prompted to select a formatting option. Select Light Red Fill with Dark Red Text, please.

What Do You See? Any amount less than the Average is highlighted red with red text. Any amount greater than the Average is formatted green/green.

Keep going...(this is actually fun, isn't it?)

Home-> Styles-> Conditional Formatting -> Top/Bottom Rules
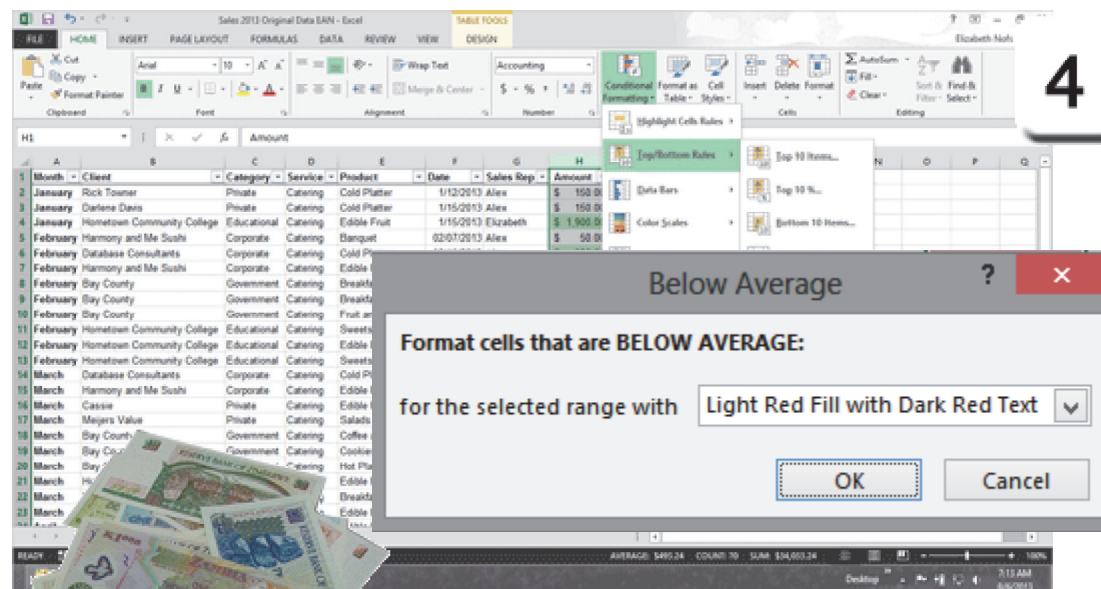
E	F	G	H
Product	**Date**	**Sales Rep**	**Amount**
Cold Platter	1/12/2013	Alex	$ 150.00
Cold Platter	1/15/2013	Alex	$ 150.00
Edible Fruit	1/15/2013	Elizabeth	$ 1,900.00
Banquet	02/07/2013	Alex	$ 50.00
Cold Platter	02/10/2013	Alex	$ 950.00

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Apply Rules (Top/Bottom)

Take One

Clear the Rules

The following pages will play with the various Conditional Formatting Rules. After each example, you can **Clear** the Conditional Formatting. Here are the steps.

Try it: Clear the Conditional Formatting
Select Column H.
Go to **Home ->Home -> Styles.**
Go to **Conditional Formatting.**
Go to **Clear Rules.**
Select: **Clear Rules from Selected Cells.**
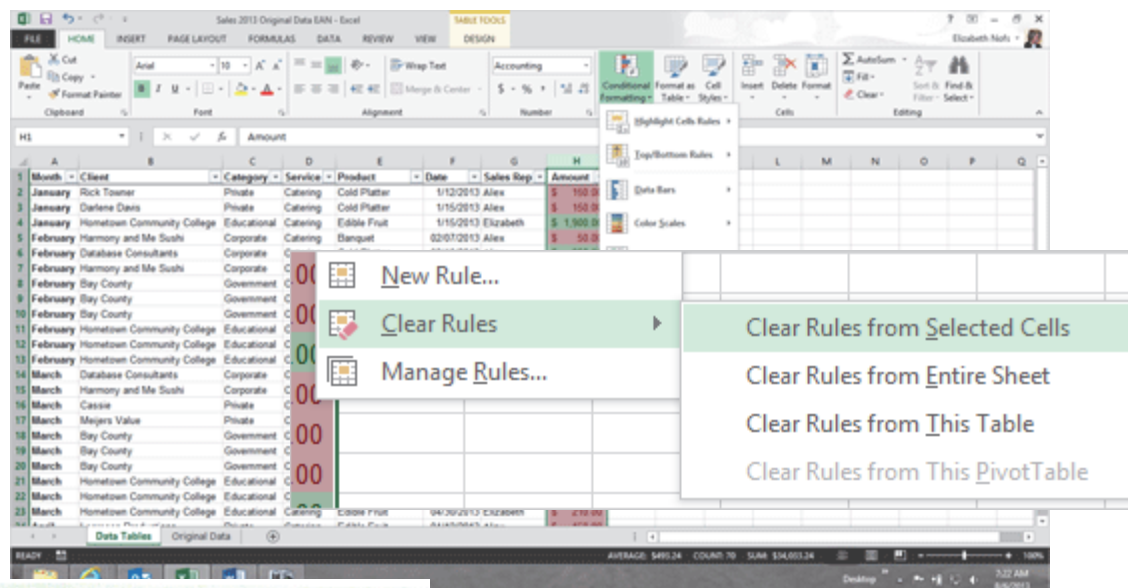
What Do You See? You can **Clear Rules** from Selected Cells, the Entire Sheet, this Table or from a PivotTable.

Home-> Styles-> Conditional Formatting-> Clear Rules

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Clear Rules

Data Bars

The following exercises demonstrate the various **Conditional Formatting** available in Microsoft Excel. All of these examples will be applied to the H Column, the one with sales data. The Amount has been **Sorted** Descending.

Try It: Format with Data Bars
Select Column H.
Go to **Home -> Styles.**
Go to **Conditional Formatting.**
Select: **Data Bars.**

What Do You See? The cell with the highest value is 100% filled in. The other cells are filled with less than 100%. Excel calculates the percentage.

After each trial, select the H Column.
Go to **Conditional Formatting -> Clear Rules -> From the Selected Cells.**

G	H
Sales Rep	**Amount**
Niki	$ 4,000.
Niki	$ 3,850.
Niki	$ 2,400.
Niki	$ 2,310.
Elizabeth	$ 1,900.
Alex	$ 1,100.
Alex	$ 950.
Connie	$ 600.
Connie	$ 600.
Connie	$ 600.
Connie	$ 600.00
Elizabeth	$ 600.00

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Use Functions To Format Cells

Take One

Use Color Scales

Try It: Format with Color Scales
Select Column H.
Go to **Home-> Styles.**
Go to **Conditional Formatting.**
Select **Color Scales**: You will have a short set of built-in options.

What Do You See? The Color Scales use two colors to indicate the Conditional Formatting. In this example, the highest value is red and the lowest is yellow. Excel compares each amount and formats the Cells accordingly.

Try This, Too: What does it look like if you sort the information by Data Bars? Can you read the numbers through the Cell formatting?

After each trial, select the H Column.
Go to **Conditional Formatting -> Clear Rules -> From the Selected Cells.**

Home-> Styles-> Conditional Formatting-> Color Scales

		Accounting	▾
$ ▾ % ,	←.0 .00 .00 →.0		

Number

Conditional Formatting ▾ Format as Table ▾ Cell Styles ▾

Insert ▾ Delete ▾ Format ▾

∑ Aut
↓ Fill
Clⁱ

Cells

Highlight Cells Rules ▸

Top/Bottom Rules ▸

Data Bars ▸

Color Scales ▸

Icon Sets ▸

New Rule...
Clear Rules ▸
Manage Rules...

More Rules...

G	H		L	M
Sales Rep ▾	Amount			
Niki	$ 4,000.			
Niki	$ 3,850.			
Niki	$ 2,400.			
Niki	$ 2,310.			
Elizabeth	$ 1,900.			
Alex	$ 1,100.			
Alex	$ 950.			
Connie	$ 600.			
Connie	$ 600.			
Connie	$ 600.			
Connie	$ 600.00			

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Use Functions To Format Cells

Use Icon Sets

Try It: Format with Icon Sets
Select Column H.
Go to **Home -> Styles.**
Go to **Conditional Formatting.**
Select **Icon Sets:** Arrows (Colored).

What Do You See? The Icon Sets use a three, four, or five-color scale to format the data.

In this example, there are four Directional arrows that represent the percentages of the total Amount in Column H:
100-75%
74-50%
49-25%
25-0%

What Else Do You See? The Conditional Formatting menu also lets you create a **New Rule** or **Manage the Rules**.

Let's investigate where Excel puts the Rules and what tools are available in the **Rules Manager**.

Keep going...

Home-> Styles-> Conditional Formatting-> Icon Sets
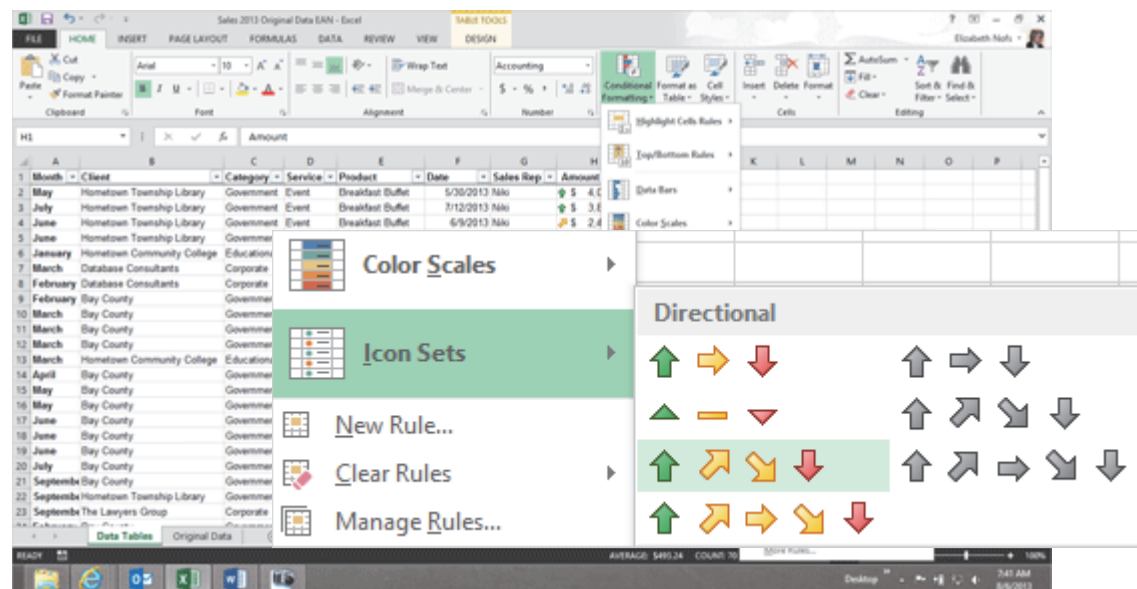
E	F	G	H
Product	Date	Sales Rep	Amount
Breakfast Buffet	5/30/2013	Niki	⬆ $ 4,000.00
Breakfast Buffet	7/12/2013	Niki	⬆ $ 3,850.00
Breakfast Buffet	6/9/2013	Niki	➡ $ 2,400.00
Breakfast Buffet	6/10/2013	Niki	➡ $ 2,310.00
Edible Fruit	1/15/2013	Elizabeth	➡ $ 1,900.00

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Use Functions To Format Cells

Take One

Home -> Styles->Conditional Formatting -> Manage Rules

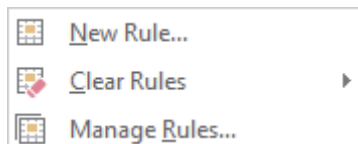## The Rules Manager

Before You Begin: In this example, Column H is the Amount, sorted Descending. Column H has the Icon Set Formatting with four (4) arrows.

1. Try It: Use the Rules Manager
Go to **Home -> Styles.**
Go to **Conditional Formatting**.
Click on **Manage Rules**.

New Rule...

Clear Rules ▶

Manage Rules...

What Do You See? The **Rules Manager** should display a list of the Conditional Formatting. You can add, delete, and edit the Rules here.

2. Try This, Too: Edit the Rule
Click on **Edit Rule**...

Keep going, pleeeeeease...

1

2

Conditional Formatting Rules Manager

Show formatting rules for: | Current Selection ▾

New Rule... | Edit Rule... | ✕ Delete Rule | ▲ | ▼

Rule (applied in order shown)	Format			Applies to	
Icon Set	⬆	↗ ↘	⬇	=$H:$H	

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Manage Conditional Format Rules

Take
One

Bend the Rules

3. What Do You See? The **Rule Type** is a list of options. You can use a Rule to identify a cell by the values. The values can be based on the average or the rank. You can also use a formula in a rule.

The **Rule Description** is a tool for defining the values. You can select the formatting **Style** and type in your own **Value** if you wish.

You can edit each part of the Rule Description including the Icons, the values and the colors.

It's kind of fun. Click OK to return to the Rules Manager, and OK, again, to close the Rules Manager.

Very Good!

Keep going...

Select a Rule Type:

► Format all cells based on their values
► Format only cells that contain
► Format only top or bottom ranked values
► Format only values that are above or below average
► Format only unique or duplicate values
► Use a formula to determine which cells to format

3

Edit the Rule Description:

Format all cells based on their values:

Format Style: | Icon Sets | ☐ Reverse Icon Order

Icon Style: ⬇ ↘ ↗ ⬆ | ☐ Show Icon Only

Display each icon according to these rules:

Icon			Value	Type
⬆		when value is	>=	75	Percent
↗		when < 75 and	>=	50	Percent
↘		when < 50 and	>=	25	Percent
⬇		when < 25			

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Write Custom Conditional Formats

Take One

Filter -> Filter by Color

Use Rules to Filter the Data
You can use the **Conditional Formatting** to **Filter** the data by Color, Number or criteria.

4. Try This: Use Advanced Filters
Column H was formatted with an Icon Set that has four (4) arrows.
Select Cell H1. The Filter should be available.
Go to **Filter->Filter by Color.**
Click on **Filter by Cell Icon**: Green.

The green arrow is when the value is greater than or equal to 75%. Microsoft Excel will display the Cells with Conditional Formatting in Column H that meet the criteria.

4

E	F	G	H	I	J
Product ▾	**Date** ▾	**Sales Rep** ▾	**Amount** ↴		
Breakfast Buffet					
Breakfast Buffet					
Breakfast Buffet					
Breakfast Buffet					
Edible Fruit					
Cold Platter					
Cold Platter					
Fruit and Veggies					
Coffee and Tea					
Cookies and Tea					
Hot Platter					
Breakfast Buffet					
Fruit and Veggies					
Fruit and Veggies					
Breakfast Buffet					
Coffee and Tea					
Breakfast Buffet					
Fruit and Veggies					
Breakfast Buffet					
Breakfast Buffet					

Sort Smallest to Largest
Sort Largest to Smallest
Sort by Color ▸
Clear Filter From "Amount"
Filter by Color ▸
Number Filters ▸

Search 🔍

☑ (Select All)
☑ $50.00
☑ $100.00
☑ $150.00
☑ $210.00
☑ $300.00
☑ $400.00
☑ $600.00
☑ $950.00
☑ $1,100.00

OK   Cancel

Filter by Font Color
[black bar]
Automatic

Filter by Cell Icon
⬆ (green)
↗ (orange)
↘ (orange)
⬇ (red)
No Cell Icon

Exam 77-427 Microsoft Excel 2013 EXPERT
2. Apply Custom Formats and Layouts
2.2 Apply Advanced Conditional Formatting and Filtering: Create Advanced Filters

Table Tools-> Design ->Properties-> Resize Table

Table Tools: Properties

The **Table Tools** include two more groups of options: **Table Properties** and **Table Tools**.

Before You Begin: Review the Properties
The Table Properties include the **Title** and the **Range**. By default, the Title is Table1.

Try it: Resize the Table
The Resize Table button lets you select the Range of Cells. Click anywhere on the Table. The Table Tools should be available.

Go to **Table Tools-> Design ->Properties**
Select **Resize Table.**

What Do You See? Microsoft Excel will outline the Range of the Table. In the example on this page, the Table is =$A$1:$H$71. The Range is in Absolute references.

You can select a new range, but the Header must stay the same.

Resize Table

Select the new data range for your table:

=$A$1:$H$71

Note: The headers must remain in the same row, and the resulting table range must overlap the original table range.

OK   Cancel

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.1 Create a Table: Table Properties (Title and Size)

Take
One

Home->Clipboard->Copy

Table: Remove Duplicates

When people enter data into a table or list, it is easy to make a mistake and type a name twice. Duplicates happen. In this example, we will copy and paste a Row, then go through the steps to find the duplicate.

1. Try This: Create the Duplicate
Select Row 69
Go to **Home->Clipboard->Copy**.
Select Cell A70. (In our example, we added a new, blank Row 70 a few pages back.)
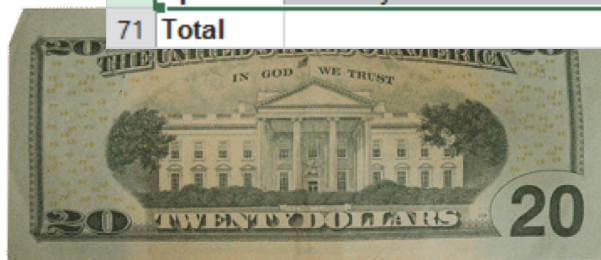Go to **Home->Clipboard->Paste**.

What Do you See? The pasted Cells are a duplicate of the Row that you copied.

Keep going...

	Table Name:	Summarize with PivotTable	
	Table1	Remove Duplicates	Insert Slicer
	Resize Table	Convert to Range	
	Properties	Tools	

67	**March**	Meijers Value	Private	Catering	Salads and Soup
68	**April**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
69	**April**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
70	**April**	Harmony and Me Sushi	Corporate	Catering	Edible Fruit
71	**Total**				

Take
One

Table Tools-> Design ->Tools-> Remove Duplicates

2

Table: Remove Duplicates
2. Try This: Remove Duplicates
Click anywhere on the Table. The Table Tools should be available.
Go to **Table Tools-> Design ->Tools.**
Click on **Remove Duplicates**.

What Do You See? Each of the Columns in our table is selected. The Column Names come from the Header Row.

When you click on **OK**, the duplicates will be found and removed.

So, that's good, too.

Remove Duplicates   ?   ✕

To delete duplicate values, select one or more columns that contain duplicates.

[▦ Select All]   [▦ Unselect All]   ☑ My data has headers

Columns
☑ Month
☑ Client
☑ Category
☑ Service
☑ Product
☑ Date

                                                    OK   Cancel

---

Microsoft Excel   ✕

ℹ   4 duplicate values found and removed; 65 unique values remain.

                              OK
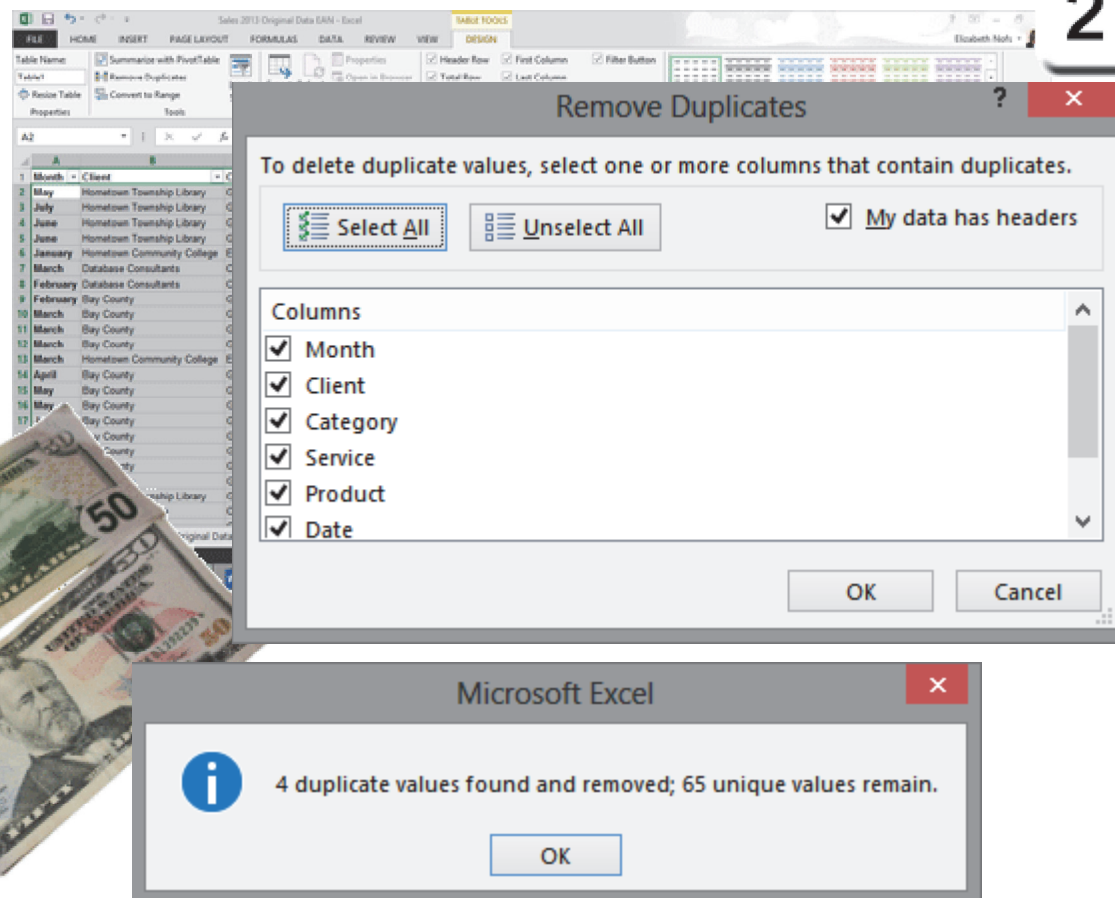
Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.3 Filter and Sort a Table: Remove Duplicates

Take One

Table Tools-> Design ->Tools-> Convert to Range

Convert to Range

This lesson began by creating a Table by selecting a Range of Cells. What if you wanted to remove the Table but keep the data? Here are the steps you can take to convert the table back to a Range, or List.

Try it: Convert the Table to a Range
Click anywhere on th.e Table. The Table Tools should be available.
Go to **Table Tools-> Design ->Tools.**
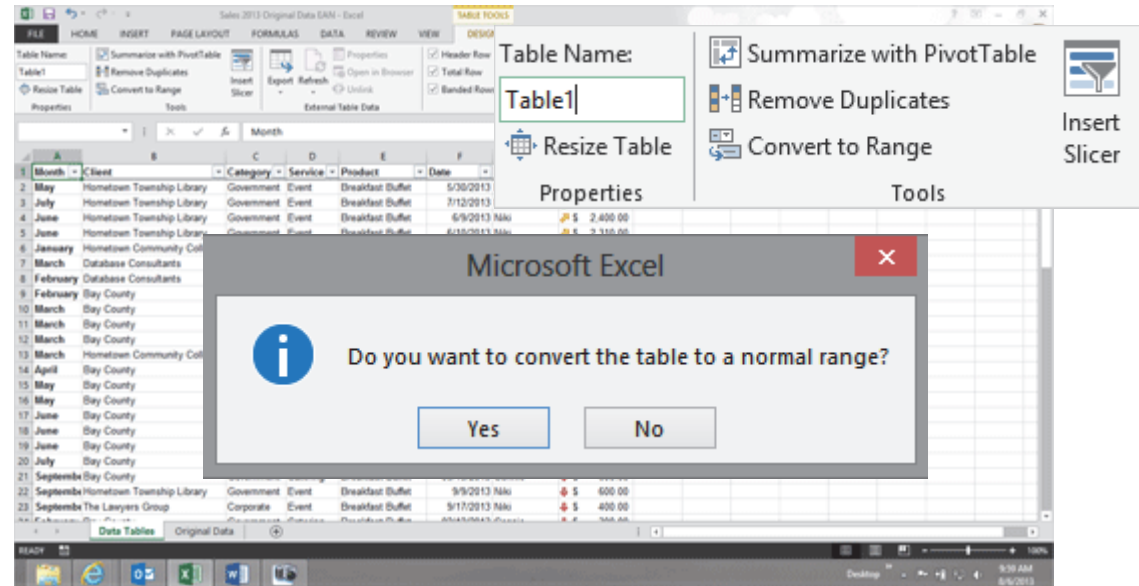Click on **Convert to Range.**

What Do You See? You will be prompted that the Table will be converted to a normal range. None of the data should be lost when you convert to Range.

The data will still have the Conditional Formatting, however the Filters at the top in the Header Row will be gone.

Done and done. You get the cookie.

E	F	G	H
Product	**Date**	**Sales Rep**	**Amount**
Breakfast Buffet	5/30/2013	Niki	⬆ $ 4,000.00
Breakfast Buffet	7/12/2013	Niki	⬆ $ 3,850.00
Breakfast Buffet	6/9/2013	Niki	⬈ $ 2,400.00
Breakfast Buffet	6/10/2013	Niki	⬈ $ 2,310.00
Edible Fruit	1/15/2013	Elizabeth	⬊ $ 1,900.00

Exam 77-420 Microsoft Excel 2013
3. Create Tables
3.1 Create a Table: Move Between Tables and Ranges (Convert to Range)

Practice Activities

Lesson 1: It Works for Me!
Before You Begin: Download the sample spreadsheet: Student Records.xlsx

Try This: Do the following steps

1. Open the spreadsheet: Student Records.xlsx

2. Delete the columns for Grade and Homeroom Teacher

3. Add the following students to the bottom of the spreadsheet

Student	Percent	Class
Lauren Ball	96	2012
Brandon Ayers	45	2011
Arnold Johnston	78	2012
Brittney Evans	82	2013

4. Sort the Spreadsheet by Class

5. Format with Table Style Light 8 and select "My Table has Headers"

6. Use the Remove Duplicate Tool

7. Apply conditional formatting to the Percent Column, Column B. Create a new rule and select 2 color scale.
   Pick red for the lowest value and green for the highest value.

8. Save this as YOUR NAME Works for Me Practice

Test Yourself

1. Which of the following is a way to copy a sheet in a workbook?
(Select all correct answers)
a. Home-> Cells-> Format-> Move or Copy
b. Right click the sheet and select Move or Copy
c. Save As-> Copy
Tip: Advanced Excel, page 15

2. When using the sort command on a column of Months, by default, the column is sorted alphabetically, with April first.
a. True
b. False
Tip: Advanced Excel, page 16

3. Where is the Sort command that allows for custom sorting of months?
a. Home-> Sort & Filter-> Custom Sort
b. Data-> Sort & Filter-> Sort-> Custom List
c. Data-> Sort & Filter-> Months
Tip: Advanced Excel, page 18

4. Excel can make tables of data.
a. True
b. False
Tip: Advanced Excel, page 21

5. Which is true about a Total Row in an Excel Table?
(Select all correct answers.)
a. Created by checking Total Row on the Table Tools Ribbon
b. Includes a Summary box with a drop down list of options
c. Can only be used to calculate Sum
d. Can only be used on small tables
Tip: Advanced Excel, page 27, 28

6. Which are true about Conditional Formatting? (Select all correct answers.)
a. Colors or icons are based on rules
b. Command is Home->Styles->Conditional Formatting
c. Includes option for creating custom rules
d. Can only have one rule applied
Tip: Advanced Excel, page 31-33

7. Which commands are on the Table Tools ribbon? (Select all correct answers.)
a. Remove duplicates
b. Convert to Range
c. Insert Rows
Tip: Advanced Excel, page 44

8. The Filters can be used to select any cell (s) with Conditional Formatting applied.
a. True
b. False
Tip: Advanced Excel, page 40

9. Which is a type of Conditional Formatting?
(Select all correct answers.)
a. Icon Sets
b. Color Scales
c. Data Bars
d. Fill & Text Colors
Tip: Advanced Excel, page 31

10. An Excel Table has a library of Table Styles.
a. True
b. False
Tip: Advanced Excel, page 24