



Analyzing Data Visually

PivotTables: What Happened?

Advanced Excel Objectives

In this lesson, you will learn how to:

1. Identify the steps needed to create a PivotTable.
2. Use Row Labels to filter the data.
3. Use the Field Settings to Count Values.
4. Pivot the Table!
5. Format the PivotTable and Pivot Table Reports.



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The screenshot displays an Excel spreadsheet with a PivotTable. The PivotTable is set up with 'Category' and 'Product' as row labels, and 'Month' as the column label. The values are summed. The PivotTable Fields task pane is open on the right, showing the following configuration:

- Filters:** None
- Columns:** Month
- Rows:** Category, Product
- Values:** Sum of Amount

The data in the PivotTable is as follows:

Category	Product	January	February	March	April	May	June	July	August	September	Grand Total
Corporate	Banquet		50								50
	Breakfast Buffet								400		400
	Cold Platter	900		1100							2000
	Edible Fruit	100		90							190
	Fruit and Veggies					100					100
	Private				100						100
Corporate Total		1100	1150	1100	100				400		2850
Educational	Banquet				210	210	630	420	210		1680
	Breakfast Buffet										
	Cold Platter										
	Edible Fruit	1900		210							2110
	Hot Platter										
	Sweets							420			420
Educational Total		1900		210				420			2530
Government	Breakfast Buffet								600		600
	Coffee and Tea										
Government Total									600		600



Lesson 3: Pivot Tables: What Happened?

1. Readings

Read Lesson 3 in the Advanced Excel guide, page 83-116.

Project

A spreadsheet that works with PivotTables in Excel. This lesson shows how to present data visually, format data as a PivotTable and display the Totals.

Downloads

[Customer Sales 2013.xlsx](#)

[Brown Bag Lunch Sales Team.xlsx](#)

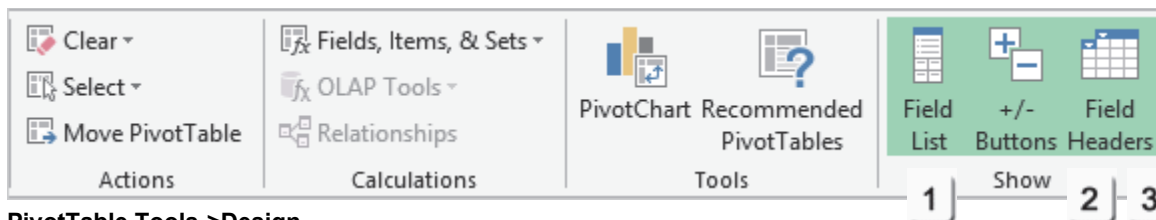
2. Practice

Complete the Practice Activity on page 117.

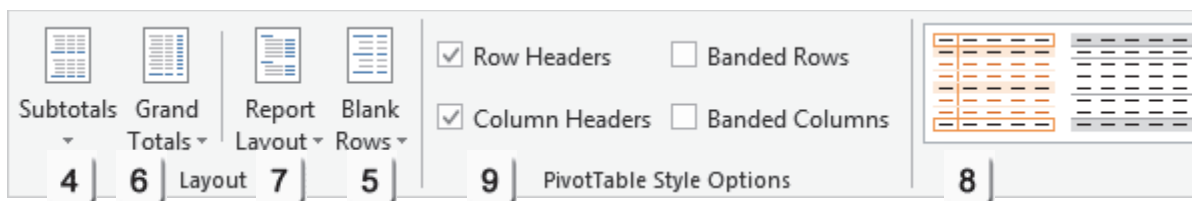
3. Assessment

Review the Test questions on page 118.

PivotTable Tools->Analyze



PivotTable Tools->Design



Menu Maps

This lesson demonstrates the **Pivot Table Tools Design Ribbons**.

1. [PivotTable Tools ->Analyze-> Show-> Field List](#), page 90
2. [PivotTable Tools ->Analyze-> Show-> Field Headers](#), page 93
3. [PivotTable Tools ->Analyze-> Active Field-> Field Settings](#), page 96
4. [PivotTable Tools ->Design-> Layout-> Subtotals](#), page 104
5. [PivotTable Tools ->Design-> Layout->Blank Rows](#), page 105
6. [PivotTable Tools ->Design-> Layout-> Grand Totals](#), page 106
7. [PivotTable Tools ->Design-> Layout->Report Layout](#), page 110
8. [PivotTable Tools ->Design-> PivotTable Styles->Style](#), page 111
9. [PivotTable Tools ->Design-> PivotTable Style Options](#), page 112

From the **Insert** Ribbon

[Insert->Tables->Pivot Table](#), page 87



What Happened? The Right Tool for the Task

When something goes wrong, everyone wants to go through the data and find out what happened. The Data Tools are: Sort, Filter, Group and Subtotal. A **PivotTable** combines all of the best Data Tools together. A PivotTable presents the data in a visual, interactive format. PivotTables summarize, sort, compare and filter the data. For some reason, most people teach PivotTables as an advanced topic. In this lesson, "advanced" doesn't mean difficult: just more steps.

The Computer Mama sez formulas can be difficult. This is actually fun. Try something different.

The screenshot shows the Microsoft Excel 2013 interface with a PivotTable and the PivotTable Fields task pane. The PivotTable is titled "Sum of Amount" and is filtered by "Month" (January and February). The data is summarized by "Category" and "Product". The PivotTable Fields task pane shows the following configuration:

- FILTERS:** Month
- COLUMNS:** (Empty)
- ROWS:** Category, Product
- VALUES:** Sum of Amount

Sum of Amount	Month
Category	Product
Corporate	
	Banquet
	Breakfast Buffet
	Cold Platter
	Edible Fruit
	Fruit and Veggies
	Private
Corporate Total	1100



Before You Begin

The purpose of this lesson is to investigate the **PivotTable** Options in Microsoft Excel. You can use a spreadsheet that you created or download a sample spreadsheet if you wish. The sample, [Customer Sales 2013.xlsx](#), has two spreadsheet Tabs: Monthly Sales and Customer List.

1. Try This: Open a Sample Spreadsheet

Open a sample spreadsheet:

[Customer Sales 2013.xlsx](#)

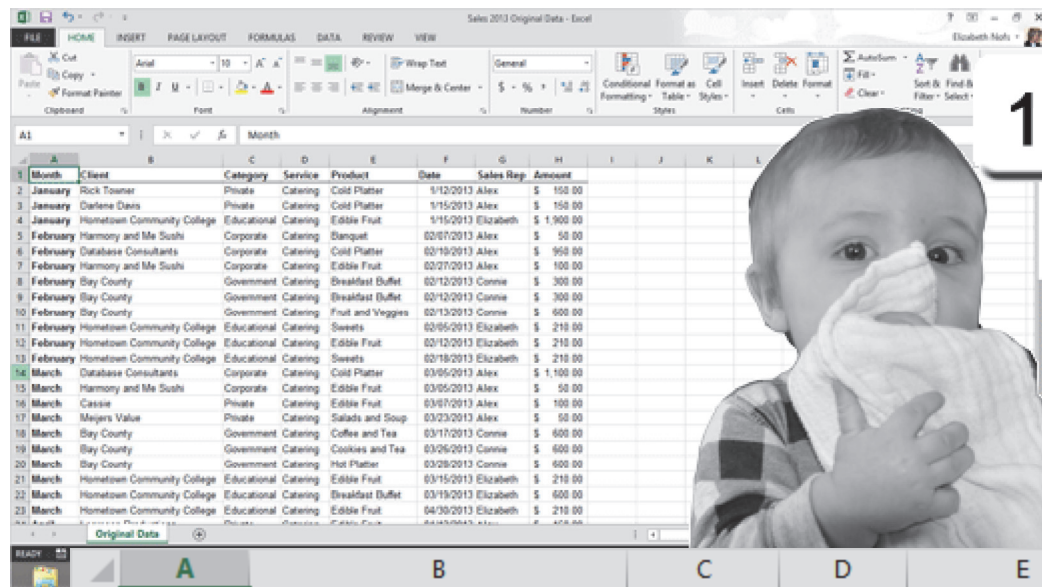
Go to the **Monthly Sales** sheet.

What Do You See? This sheet shows the product sales for Charlotte's Website. The first row is **BOLD**: It is the Header Row. The data should be sorted by Column A, Month. If not, go ahead and sort the data, first.

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.

File -> Open



	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



Insert a Pivot Table

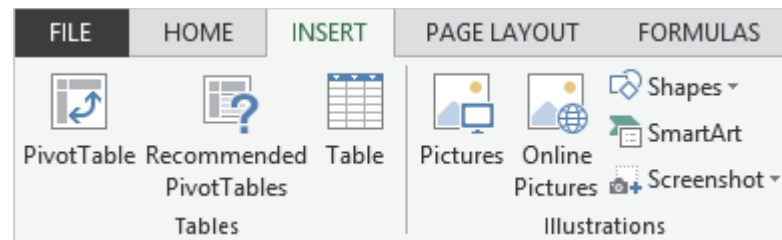
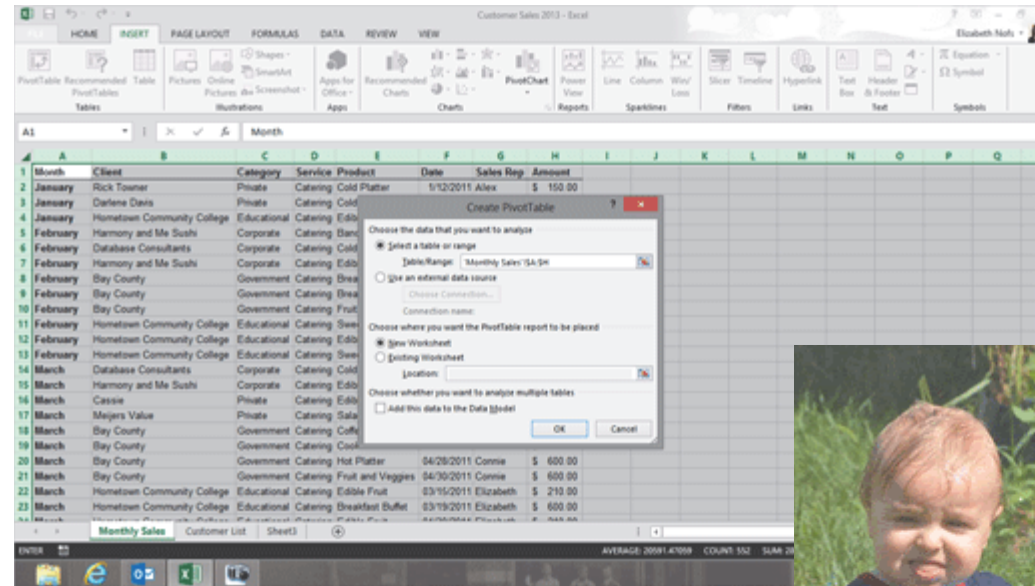
A PivotTable summarizes data and displays the results. It is a reporting tool that works very well. Here is how you start.

2: Try This: Insert a PivotTable

Go to the Monthly Sales spreadsheet.
Select all.
Go to **Insert -> Tables.**
Click on **PivotTable.**

Keep going...

Insert -> Tables -> PivotTable



Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Create New PivotTables

2



Create a PivotTable

3. Try This: Choose the data

If you selected the entire Monthly Sales sheet, Excel will display the Table or Range: 'Monthly Sales'!\$A:\$H

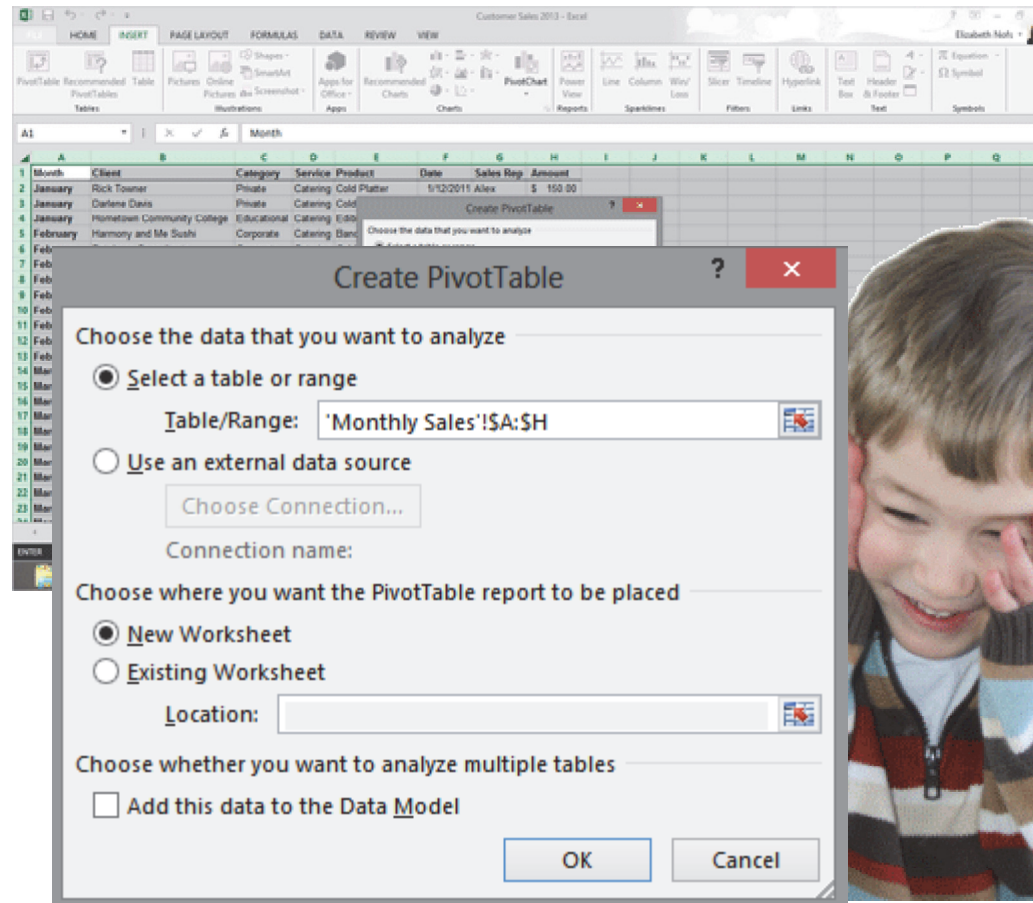
In words, that means "name of your spreadsheet" ! "all of the data in Column A through Column H."

Try This, Too: Where do you want to place the new PivotTable report? The choices are create a new PivotTable in a new worksheet or place it on an existing worksheet.

Select: **New Worksheet**.
Click **OK**.

Keep going...

Insert ->PivotTable



3



Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Create New PivotTables



Hello, PivotTable

4. What Do You See? When you click OK, Microsoft Excel will create a new, blank PivotTable in a new sheet. The **PivotTable Tools** should be available. There are two PivotTable Ribbons: **Analyze** and **Design**.

The Analyze Ribbon includes:

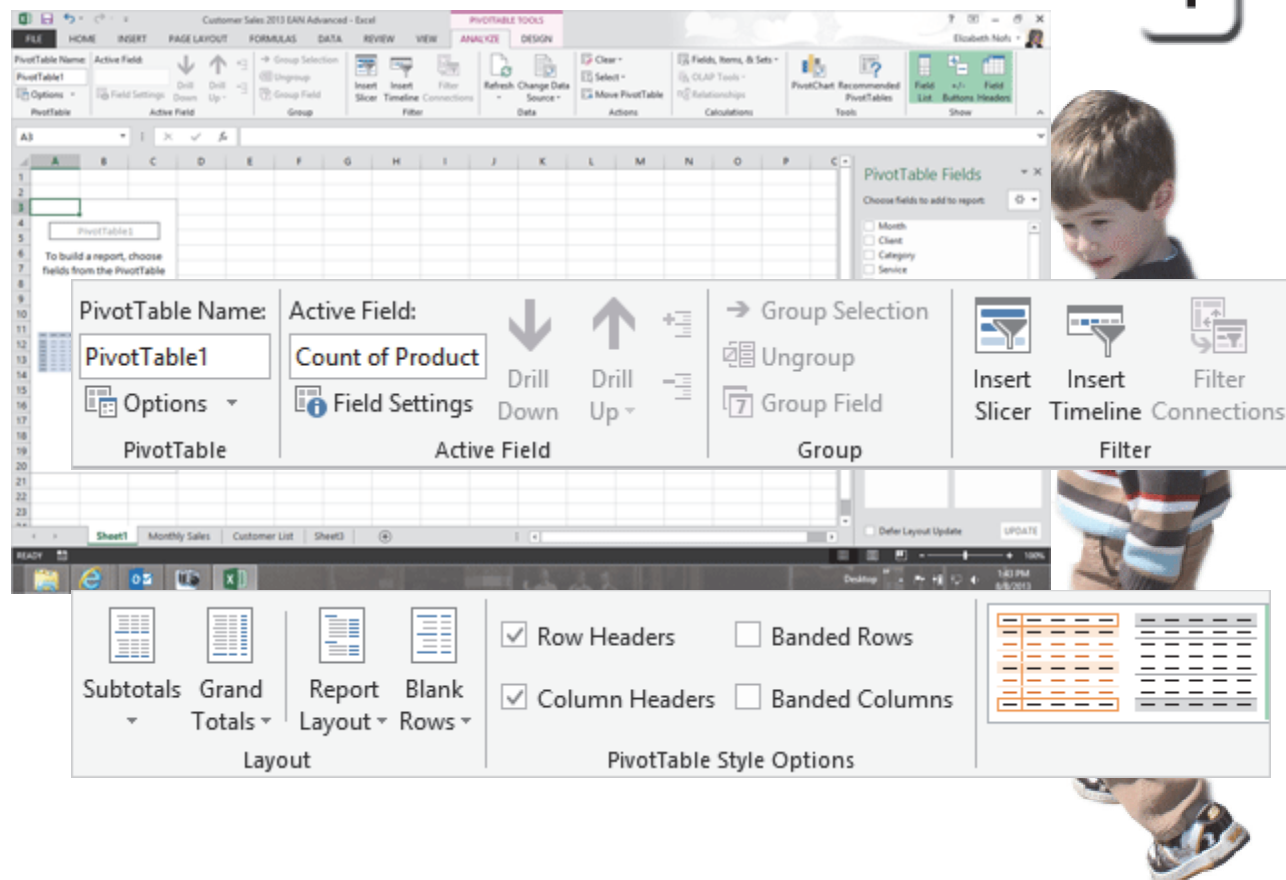
PivotTable
Active Field
Group
Filter
Data
Actions
Calculations
Tools
Show

The Design Ribbon includes:

Layout
PivotTable Style Options
PivotTable Styles

Keep going, please...

Insert -> Tables -> PivotTable



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4. Create Advanced Charts and Tables
4.2 Create and Manage PivotTables: Create New PivotTables



PivotTable Fields

5. What Else Do You See? There are three parts to a spreadsheet: labels, data, and formulas. In this example the labels include Category, Service, Product, Date, Sales Rep and Amount. These **labels** will become the **fields** in the PivotTable.

PivotTables use **fields** to organize and calculate the rows and columns. These fields come from the labels in the first row (the header) in the spreadsheet.

Look for the **PivotTable Field List** on the right side of your screen. How do the fields compare to your labels?

Keep going...

What If You Don't See It? The **Field Headers** can be turned on or off with the PivotTable Tools. If you don't see the Field List try this:
Go to **PivotTable Tools ->Analyze**.
Go to **Show-> Field Headers**.

PivotTable Tools ->Analyze-> Show-> Field List

PivotTable1

To build a report, choose fields from the PivotTable Field List

PivotTable Fields

Choose fields to add to report:

- ☐ Month
- ☐ Client
- ☐ Category
- ☐ Service
- ☐ Product
- ☐ Date
- ☐ Sales Rep
- ☐ Amount

Drag fields between areas below:

FILTERS **COLUMNS**

ROWS **VALUES**

Field List **+/- Buttons** **Field Headers**

Show

5

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4. Create Advanced Charts and Tables
4.2 Create and Manage PivotTables: Create New PivotTables



PivotTable: Add Fields

Creating a PivotTable begins by adding fields to the table. Every table calculates something: SUM, COUNT, AVERAGE, etc. In this example, we'll answer the question: What did you sell?

6. Add Fields to the PivotTable

Go to the **PivotTable Fields List**. Select: Product.

What Do You See? Look at the new PivotTable on the left side of the spreadsheet. The Products should be displayed in the PivotTable.

Keep going...



PivotTable Tools -> Analyze -> Show -> Field List

The screenshot shows the Excel 2013 interface with the 'PivotTable Tools' ribbon active. The 'Analyze' tab is selected, and the 'Show' group is expanded, displaying the 'Field List' task pane. The PivotTable is located on the left side of the worksheet, with 'Row Labels' as the only field. The data in the PivotTable is as follows:

Row Labels	
Banquet	
Breakfast Buffet	
Coffee and Tea	
Cold Platter	
Cookies and Tea	
Edible Fruit	
Fruit and Veggies	
Hot Platter	
Private	
Salads and Soup	
Sweets	
(blank)	
Grand Total	

The 'PivotTable Fields' task pane on the right shows the 'Product' field selected under 'Choose fields to add to report:'. The 'More Task Panes' section shows 'Filters' and 'Columns' are empty, and 'Rows' and 'Values' are also empty.

6

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 4. Create Advanced Charts and Tables
 4.2 Create and Manage PivotTables: Create New PivotTables



PivotTable: Row Labels

7. What Else Do You See? Look at the bottom of the Field List. PivotTables have Filters, Columns, Rows and Values. When you add a Field to PivotTable, it will be shown here.

The Product field was added to the **Row Labels**. The data is shown in Rows: one Row for each Product (Banquet, Breakfast Buffet, Coffee and Tea, Cold Platter, Cookies and Tea, Edible Fruit, Fruit and Veggies, Hot Platter, Private, Salads and Soup, Sweets, (Blank), Grand Total)

Keep going...

PivotTable Tools -> Analyze -> Show -> Field List

The screenshot shows the Microsoft Excel 2013 interface. The PivotTable Tools ribbon is active, and the 'Field List' task pane is open on the right. The PivotTable is located in the worksheet, and the 'Product' field is added to the 'Row Labels' area. The task pane shows the 'Product' field in the 'ROWS' area. A child is standing next to the task pane, holding a phone to their ear.

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 4.2 Create and Manage PivotTables: Create New PivotTables



PivotTable: Field Headers

Row Labels are Filters. The top row of the PivotTable is the Row Label: This is the **Field Header**. You can use the **Field Header** to display all of the products in the PivotTable or just a few.

8. Try This: Filter the Data

Go to Cell A3.

Click on the **Row Labels**.

Select: Edible Fruit.

Select: Fruit and Veggies.

When you click **OK**, the PivotTable will display those two products.

Try This, Too: Show All of the Data

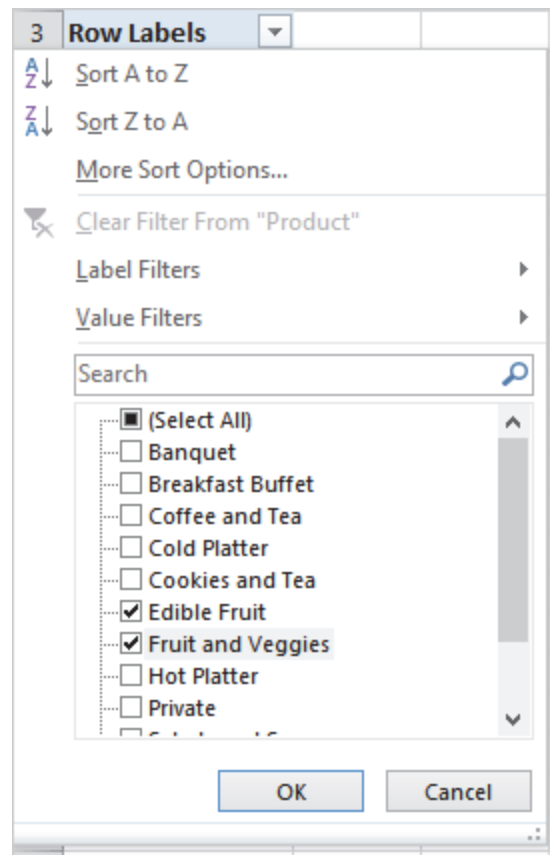
Click on the Row Labels:

Select: **(Select All)**

Click **OK**.

What If You Don't See It? The **Field Headers** can be turned on or off with the PivotTable Tools. If you don't see the Field List please try this:
Go to **PivotTable Tools ->Options**.
Go to **Show-> Field Headers**.

PivotTable Tools ->Analyze-> Show> Field Headers



	A	B
1		
2		
3	Row Labels	
4	Edible Fruit	
5	Fruit and Veggies	
6	Grand Total	
7		

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Field Headers)



PivotTable: Field Values

So far, this PivotTable has the Products in the Rows. PivotTables also need data. When you add a Field to **Values** you can do calculations.

1. Try This: Add a Value

Go to the **Field List**

Drag and Drop Amount to the **Values**.

(Yes, it may say Count of Amount.)

Keep going...



PivotTable Tools ->Analyze-> Show> Field List

Choose fields to add to report:

- ☐ Month
- ☐ Client
- ☐ Category
- ☐ Service
- ☒ Product
- ☐ Date
- ☐ Sales Rep
- ☒ Amount

MORE TABLES...

Drag fields between areas below:

FILTERS	COLUMNS

ROWS	VALUES
Product	Count of Amount

1

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Values)



PivotTable: Values

2. What Do You See? When you add the Value, the PivotTable will automatically count the records for each row. There is a Grand Total for all of the Products, too.

This PivotTable Counts the number of sales. For example, there were 11 Banquets sold.

Count is the default field value. It might make more sense to use to SUM instead of COUNT for the Values. Where are the options?

Keep going...



PivotTable Tools ->Analyze-> Show> Field List

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable has 'Row Labels' in column A and 'Count of Amount' in column B. The data rows list various food items and their counts, ending with a 'Grand Total' of 68. To the right, the 'PivotTable Fields' task pane is visible, showing the 'Amount' field assigned to the 'VALUES' area with the 'Count of Amount' aggregation function selected.

Row Labels	Count of Amount
1	
2	
3	
4 Banquet	11
5 Breakfast Buffet	15
6 Coffee and Tea	2
7 Cold Platter	7
8 Cookies and Tea	1
9 Edible Fruit	14
10 Fruit and Veggies	5
11 Hot Platter	3
12 Private	6
13 Salads and Soup	1
14 Sweets	3
15 (blank)	
16 Grand Total	68

2

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Values)



Edit the Field Settings

3. Try This. Change the Field Settings

Select Cell B3: Count of Amount.

Go to **PivotTable Tools -> Analyze**.

Go to the **Active Field** group.

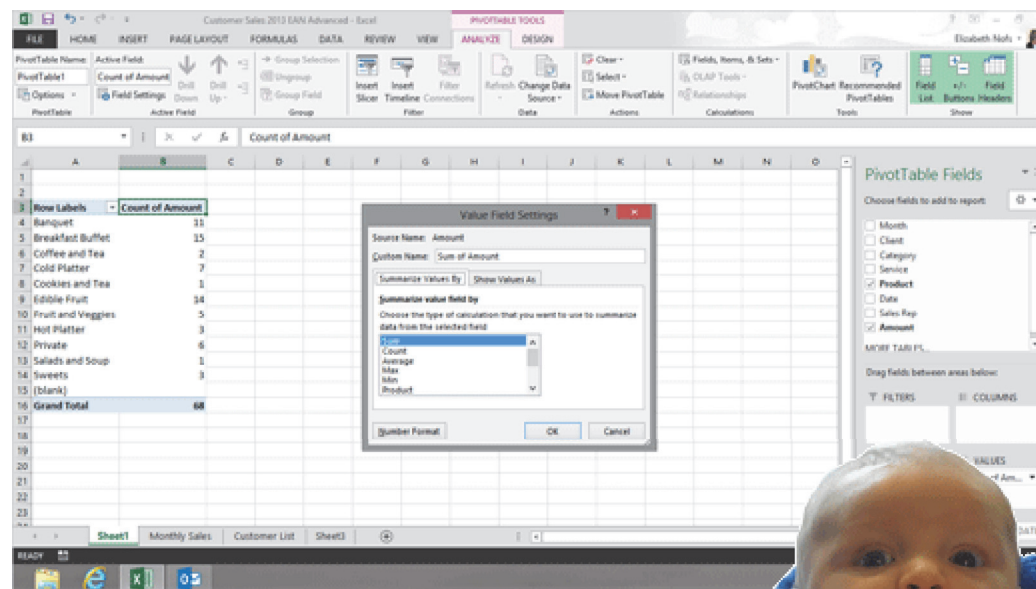
Select: **Field Settings**.



Keep going...

Memo to Self: In this example, the easy way to open the Field Settings is to double-click the **Count of Amount** Field Header on the PivotTable.

PivotTable Tools -> Analyze -> Active Field -> Field Settings



3



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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Field Settings)



Value Field Settings

A PivotTable can use these functions:

Sum
Count
Average
Max
Min
Product
Count Numbers
StDev
StDevp
Var
Varp

4. Try This: Choose the Calculation

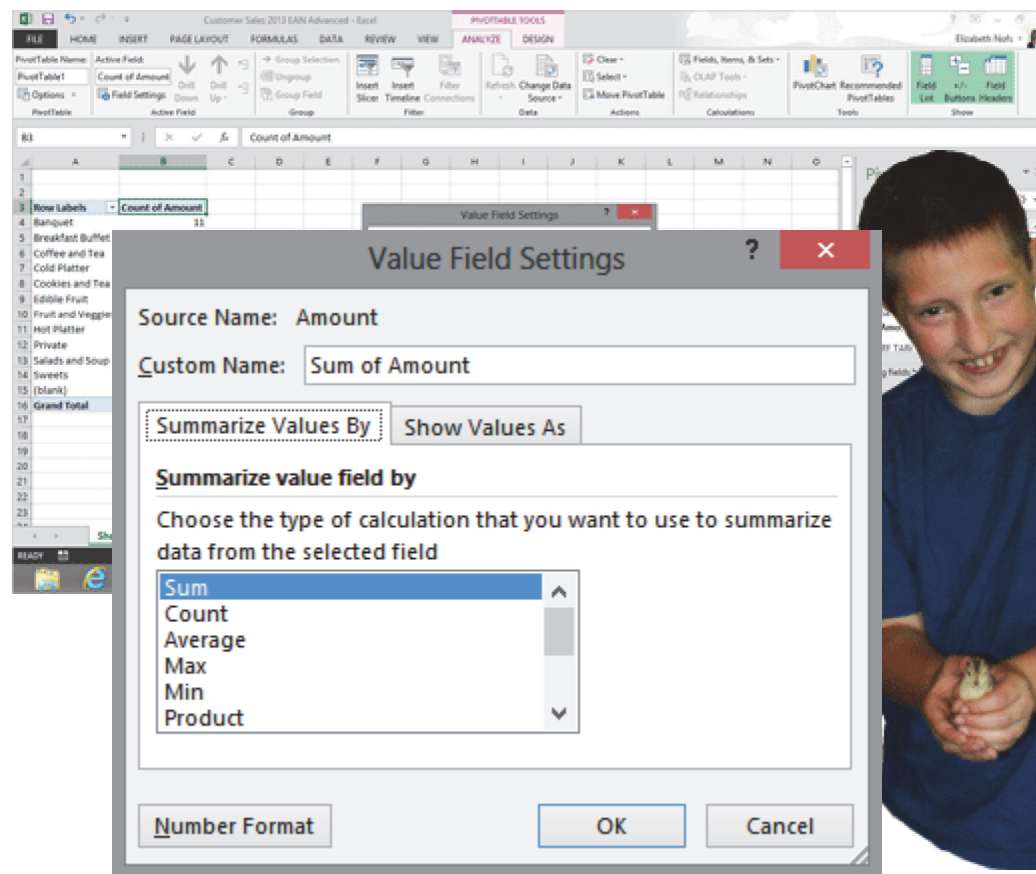
Select **Sum** from the options.

The **Custom Name** should update to:
Sum of Amount.

Click **OK** and keep going...

Memo to Self: You can summarize the values as a percent of the row, column, group or total. You can also display the values as the difference, % of difference or running total if you wish.

PivotTable Tools -> Analyze -> Active Field -> Field Settings



4



Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Use Calculated Fields



Sum of Amount

5. What Do You See? When you change the Field Settings from Count to Sum the PivotTable will update the calculations.

The example on this page shows the sales amounts, although the numbers may look odd because the amounts are not formatted for currency.

Do This: Save Your Spreadsheet

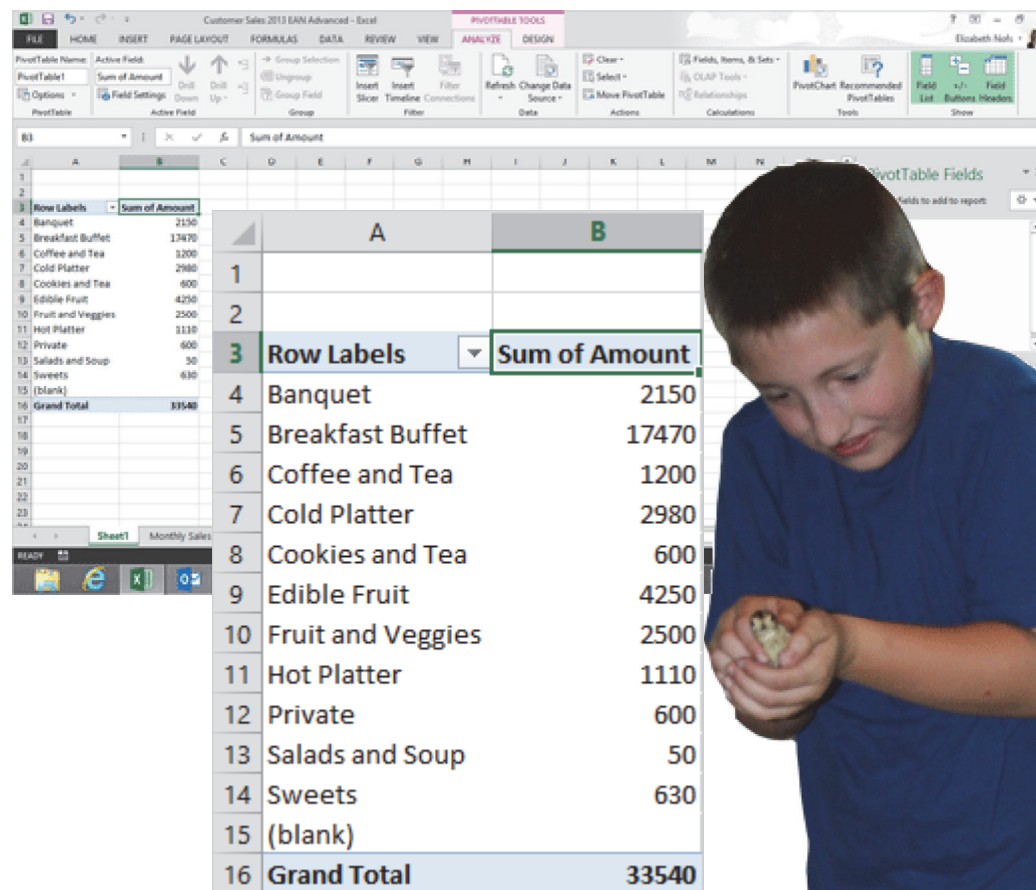
Go to **File-> Save**.

Browse to your documents folder.

File Name: My Name Customer Sales.

Click **SAVE** to save the file.

PivotTable Tools -> Analyze -> Active Field -> Field Settings



The screenshot shows the Microsoft Excel 2013 interface. The PivotTable is titled 'Sum of Amount' and is located in the 'PivotTable Fields' task pane. The PivotTable data is as follows:

Row Labels	Sum of Amount
Banquet	2150
Breakfast Buffet	17470
Coffee and Tea	1200
Cold Platter	2980
Cookies and Tea	600
Edible Fruit	4250
Fruit and Veggies	2500
Hot Platter	1110
Private	600
Salads and Soup	50
Sweets	630
(blank)	
Grand Total	33540

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Field Settings)



PivotTable Tools ->Analyze-> Show> Field List

Customer Sales 2013 EAM Advanced - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW ANALYZE DESIGN

PivotTable Name: PivotTable1
Active Field: Category
Field Settings: Drill Down, Drill Up, Group Selection, Group Field, Group, Filter, Insert Slicer, Insert Timeline, Filter, Refresh, Change Data Source, Move PivotTable, Clear, Select, Fields, Items, & Sets, OLAP Tools, Relationships, PivotChart, Recommended PivotTables, Field List, Buttons, Headers, Show

Column Labels

Sum of Amount	Corporate	Educational	Government	Private (blank)	Grand Total
Banquet	50	2100			2150
Breakfast Buffet	400	810	16180	100	17470
Coffee and Tea			1200		1200
Cold Platter	2000	630		300	2980
Cookies and Pastry			600		600
Edible Fruit		3000		100	4250
Fruit and Cheese			2400		2500
Hot Pot			900		1110
Private				500	600
Salads				50	50
Soup			250		630
Total			21470	5950	33540

PivotTable Fields

Choose fields to add to report:

- ☐ Amount
- ☐ Client
- ☒ Category
- ☐ Service
- ☐ Product
- ☐ Date
- ☐ Sales Rep
- ☒ Amount

MORE TABLES...

Drag fields between areas below:

FILTERS: [Empty Box]

COLUMNS: Category

ROWS: Product

VALUES: Sum of Amount

The Category field will be added to the **Column Header**. Here are the steps.

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

1. Try it: Add Another Field

Go to the **PivotTable Field List**.

Drag and Drop the Category Field to the **Columns**.

Keep going, please...

Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Columns)



Column Headers

2. What Do You See? This PivotTable now has a **Column Header** that shows the Categories in Columns. There is a Subtotal for each category: Corporate, Educational, Government, Private. These are the **Column Labels**.

What Else Do You See? Cell B3 is the **Filter** for the **Column Labels**.

Keep going...

Memo to Self: These numbers may look odd because they are not formatted for Accounting (\$).

PivotTable Tools ->Analyze-> Show> Field List

2

	A	B	C	D	E	F	
1							
2							
3	Sum of Amount	Column Labels					
4	Row Labels	Corporate	Educational	Government	Private	(blank)	Grand Total
5	Banquet	50	2100				2150
6	Breakfast Buffet	400	810	16160	100		17470
7	Coffee and Tea			1200			1200
8	Cold Platter	2050	630		300		2980
9	Cookies and Tea			600			600
10	Edible Fruit	150	4000		100		4250
11	Fruit and Veggies	100		2400			2500
12	Hot Platter		210	900			1110
13	Private	100			500		600
14	Salads and Soup				50		50
15	Sweets		420	210			630
16	(blank)						
17	Grand Total	2850	8170	21470	1050		33540

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Column Header)



Pivot the Table

What is a PivotTable, anyways? To Pivot means to move the data from the Rows into the Columns. This is cool.

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

3. You Gotta Try This: Pivot the Table!

Go to the **Field List**

Drag and Drop the Category Field from the Columns to the Rows.

Please make sure that Category is ABOVE the Product field.

Really, keep going...

PivotTable Tools -> Analyze

Customer Sales 2013 EAM Advanced - Excel

PivotTable Tools: ANALYZE

PivotTable Name: Sum of Amount

PivotTable Fields

Choose fields to add to report:

- Amount
- Client
- Category
- Service
- Product

Drag fields between areas below:

FILTERS

COLUMNS

ROWS

VALUES

Category

Product

Sum of Amount

3



Exam 77-420 Microsoft Excel 2013
5. Create Charts and Objects
5.1 Create a Chart: Switch Between Rows and Columns in Source Data



PivotTable: Display

4. What Do You See? There are four Categories. Each Category has a Subtotal. The names and the sum of the amounts for each Product sold is listed in alphabetical order in the client categories.

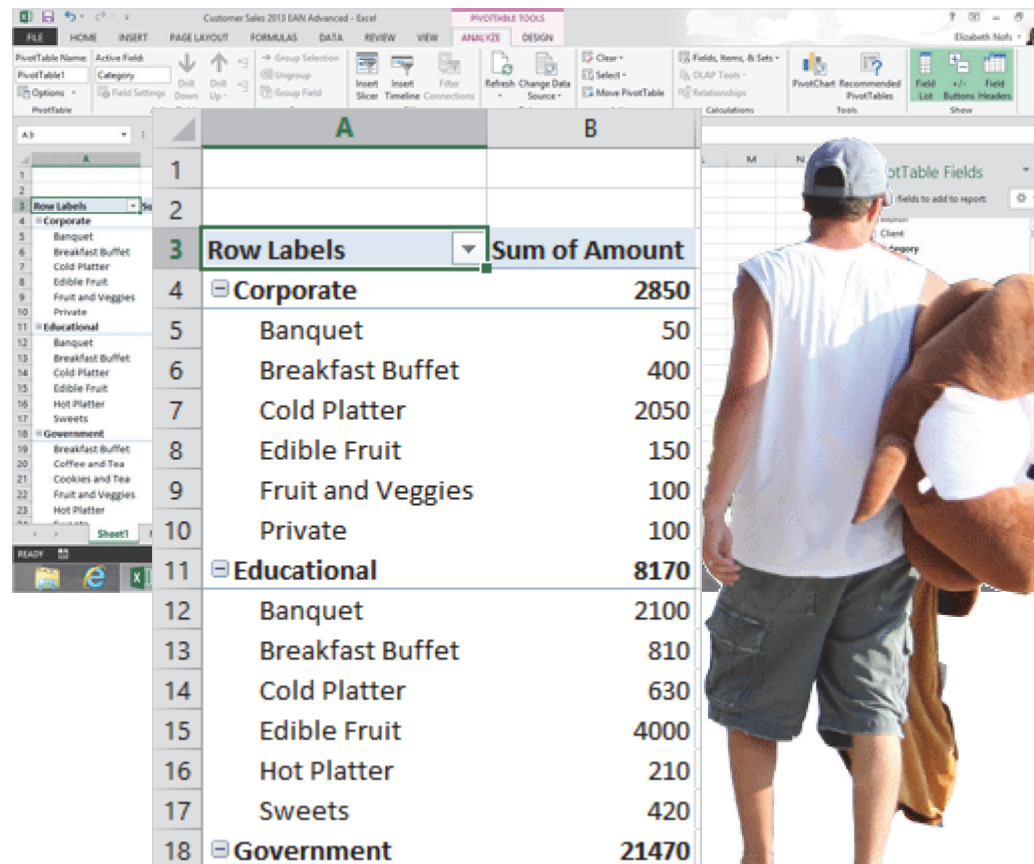
What Else Do You See? The Row Labels in Cell A3 have Filters. You can use the filter to show some or all of the Categories.

This is a good place to pause and try that again. Try switching the fields from the Row Labels to the Column Labels. Look at the PivotTable and see which way is easiest to read, which way makes more sense.

Then, **Save**.

Memo to Self: These numbers may look odd because they are not formatted for Accounting (\$).

PivotTable Tools ->Analyze



The screenshot shows the Microsoft Excel interface with the PivotTable Tools -> Analyze tab selected. The PivotTable is displayed in the worksheet, showing the sum of amounts for each product sold, grouped by client category. The categories are Corporate, Educational, and Government. The products are listed in alphabetical order within each category. The sum of amounts for each category is shown in the rightmost column. A person is standing next to the PivotTable, carrying a large stuffed animal.

Row Labels	Sum of Amount
Corporate	2850
Banquet	50
Breakfast Buffet	400
Cold Platter	2050
Edible Fruit	150
Fruit and Veggies	100
Private	100
Educational	8170
Banquet	2100
Breakfast Buffet	810
Cold Platter	630
Edible Fruit	4000
Hot Platter	210
Sweets	420
Government	21470

Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Manipulate PivotTables (Group Records)



PivotTable Design

There are two sets of PivotTable Tools. The following pages will walk through the PivotTable Tools **Design** Ribbon.

1. Try This: Review the Design Ribbon

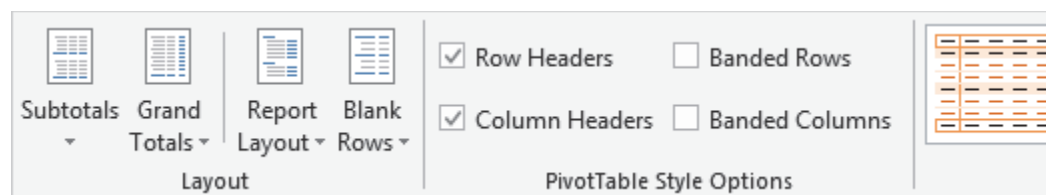
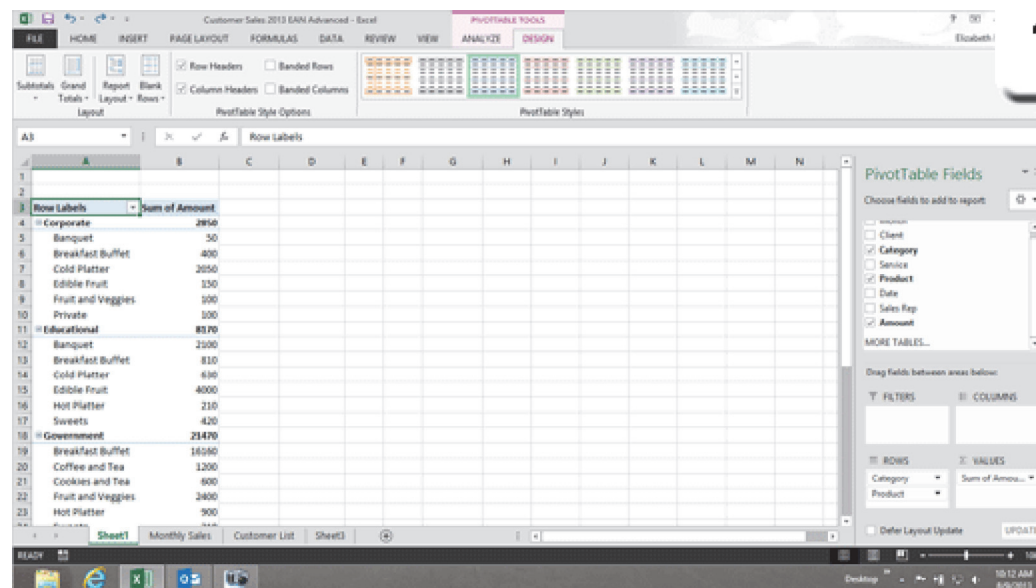
The **Layout** Group lets you format the:
Subtotals
Grand Totals
Report Layout
Blank Rows

The **PivotTable Style Options** are:

Row Headers
Column Headers
Banded Rows
Banded Columns

Keep going...

PivotTable Tools ->Design-> Layout



Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data



Design Layout: Subtotals

By default, a PivotTable displays the Subtotals at the top of a Group. You can change the Layout with the PivotTable Design Ribbon. Here are the steps:

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

2. Try it: Change The Subtotal Layout

Go to **PivotTable Tools ->Design**.

Go to **Layout-> Subtotals**.

Select: **Show all Subtotals at Bottom of Group**.

What Do You See: The Subtotal options include the following:

Do Not Show Subtotals

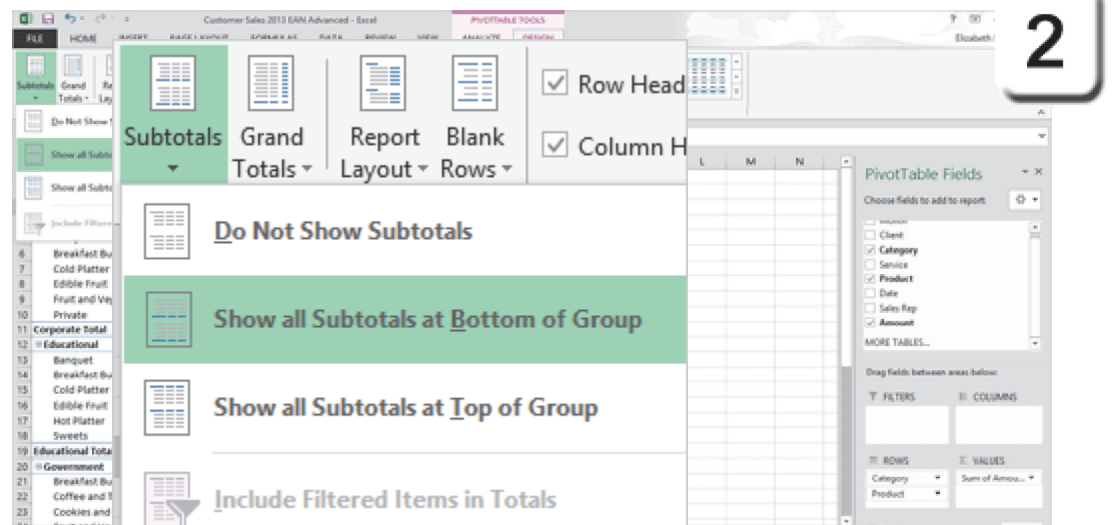
Show all Subtotals at Bottom of Group

Show all Subtotals at Top of Group

Include Filtered Items in Totals

Keep going...

PivotTable Tools ->Design-> Layout-> Subtotals



2

3	Row Labels	Sum of Amount
4	Corporate	
5	Banquet	50
6	Breakfast Buffet	400
7	Cold Platter	2050
8	Edible Fruit	150
9	Fruit and Veggies	100
10	Private	100
11	Corporate Total	2850

Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (Subtotals)



Layout: Blank Rows

This PivotTable is an Outline with a couple of groups: Category and Products. You can add **Blank Rows** between the groups to make the PivotTable easier to read.

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

3. Try it: Insert Blank Rows

Go to **PivotTable Tools ->Design**.
Go to **Layout-> Blank Rows**.
Select: Insert Blank Line after Each Item.

What Do You See? The options are:
Insert Blank Line after Each Item
Remove Blank Line after Each Item

Keep going...

PivotTable Tools ->Design-> Layout->Blank Rows

Row Labels	Sum of Amount
Corporate	
Banquet	50
Breakfast Buffet	400
Cold Platter	2050
Edible Fruit	150
Fruit and Veggies	100
Private	100
Corporate Total	2850
Educational	
Banquet	2100
Breakfast Buffet	810

Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (Blank Rows)



Layout: Grand Totals

The **Grand Totals** can be added to the Rows, the Columns, both or neither.

Before You Begin: Change The PivotTable

Select the PivotTable. The PivotTable Tools should be available.

Edit the Field List, please.

Rows: Products

Columns: Category

Values: Sum of Amount

4. Try it: Change The Grand Totals Layout

Go to **PivotTable Tools ->Design**.

Go to **Layout-> Grand Totals**.

Select: **On for Rows and Columns**.

What Do You See? The options for the Grand Totals include the following:

Off for Rows and Columns

On for Rows and Columns

On for Rows Only

On for Columns Only

Keep going...

PivotTable Tools ->Design-> Layout-> Grand Totals

4

	Government	Private	(blank)	Grand Total
				2150
	16160	100		17470
	1200			1200
		300		2980
	600			600
		100		4250
	2400			2500
	900			1110
		500		600
		50		50
	210			630
	21470	1050		33540

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (Grand Totals)



Layout: Filter the (blanks)

Well, you have been patiently waiting for this lesson for pages and pages. How do you hide the (blanks), the records that have no data- nothing, nada, de rien?

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

Try it: Filter the (blanks)

Click on the Row Labels in the PivotTable.
Unselect: (blank)

Click on the Columns Labels, too.
Unselect: (blank)

You should see **Filters** on the Column and Row Labels in the PivotTable.

So far so good.

PivotTable Tools ->Design

3	Sum of Amount	Column Labels	
4	Row Labels	Corporate	Educational
5	Banquet	50	2100
6	Breakfast Buffet	400	810
7	Coffee and Tea		



Exam 77-427 Microsoft Excel 2013 EXPERT

4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (Filter Blank Rows)



PivotTable: Report Layout

There are several **Report Layouts** that you should consider. The goal of any PivotTable is to display the data. Depending on the data, some of the layouts make sense while others seem confusing.

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

1. Try This: Edit the Field List

Rows: Category, then Product

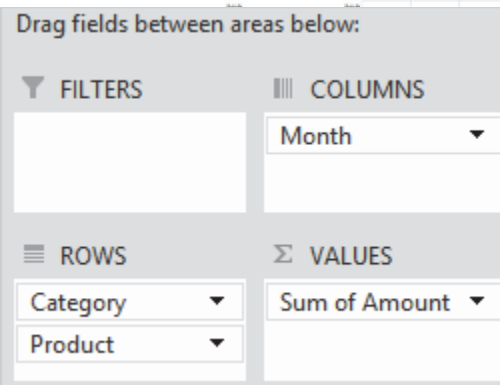
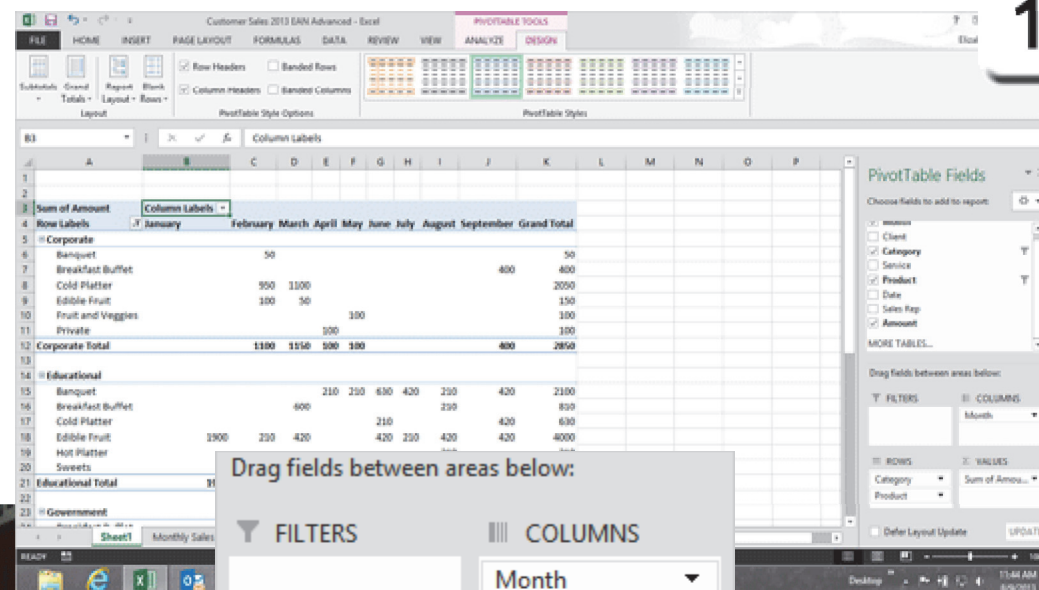
Columns: Month

Values: Sum of Amount

Keep going, please...



PivotTable Tools ->Design-> Layout



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4. Create Advanced Charts and Tables
4.2 Create and Manage PivotTables: Format Data (Design)



PivotTable: Report Layout

2. What Do You See? The PivotTable now has subgroups for each Category. The monthly sales numbers are calculated and displayed in the Columns.

What Else Do You See? The Column and Row Labels have Filters. The (blank) data has been filtered.

OK, that's the setup for this PivotTable. Let's investigate a few of the Report Layouts. Keep going, please...

Memo to Self: These numbers may look odd because they are not formatted for Accounting (\$).



PivotTable Tools ->Design->Layout->Report Layout

2

Sum of Amount	Column Labels	January	February	March	April	May
Corporate						
Banquet			50			
Breakfast Buffet						400
Cold Platter		950	1100			2050
Edible Fruit		100	50			150
Fruit and Veggies				100		100
Private						100
Corporate Total		1100	1150	100		2850
Educational						
Banquet			210	210	630	420
Breakfast Buffet				600		810
Cold Platter					210	210
Edible Fruit		1900	250	420	420	250
Hot Platter						4000
Sweets			420			250
Educational Total						420
Government						

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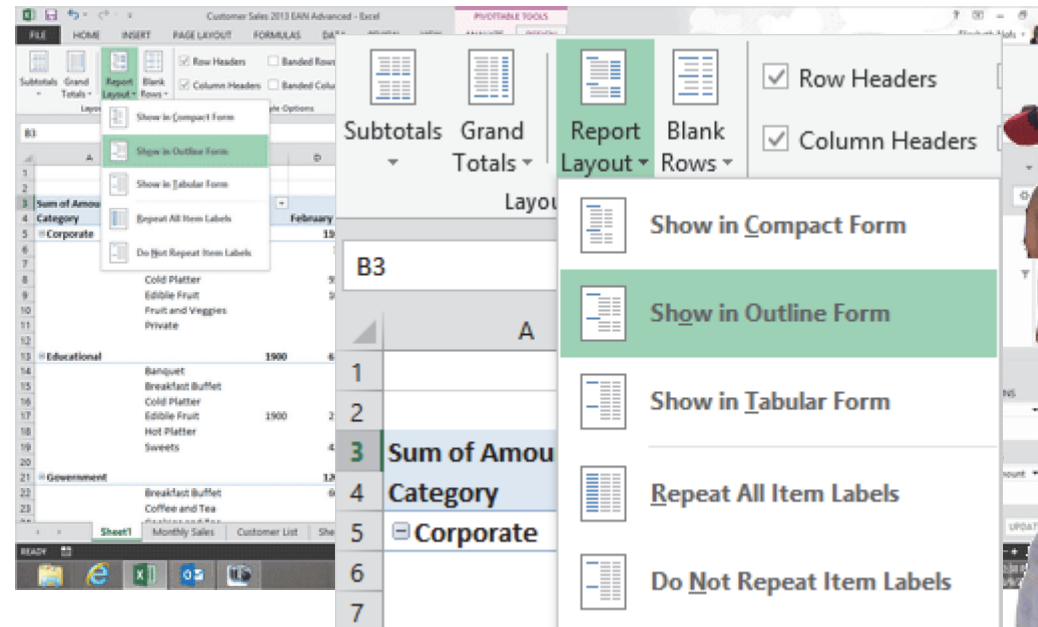
Report Layout Options

3. Try it: Change the Report Layout
Go to **PivotTable Tools ->Design->Layout->Report Layout**.
Go to **Layout->Report Layout**.
Select: **Show in Outline Form**.

What Do You See? The Report Layout options include the following:
Show in Compact Form
Show in Outline Form
Show in Tabular Form
Repeat All Item Labels
Do Not Repeat Item Labels

OK, that works for now.

PivotTable Tools ->Design->Layout->Report Layout



3	Sum of Amount	Month		
4	Category	Product	January	February
5	Corporate			
6		Banquet		50
7		Breakfast Buffet		
8		Cold Platter		950
				1100

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (Report Layout)

3





PivotTable: Styles

A PivotTable can be formatted with Styles.

Before You Begin: Select the PivotTable. The PivotTable Tools should be available.

1. Try it: Format the PivotTable Style

Go to **PivotTable Tools ->Design**.

Go to **PivotTable Styles**.

Select: **Pivot Style Medium 3**.

What Do You See? The PivotTable Styles formatted the **Column Headers** (Sum of Amount, Category, Product) as well as the **Row Headers** (Corporate, Educational, etc.)

Keep going...

PivotTable Tools ->Design-> PivotTable Styles



3	Sum of Amount		Month	
4	Category	Product	January	February
5	Corporate			
6		Banquet		50
7		Breakfast Buffet		
8		Cold Platter		950
9		Edible Fruit		100
		Fruit and Veggies		
		Private		
	Corporate Total			1100

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (PivotTable Styles)



PivotTable Style Options

The **PivotTable Style Options** offer quick formatting choices. Here are the steps.

2. Try it: Edit the PivotTable Style Options

Select the PivotTable.

Go to **PivotTable Tools ->Design**.

Go to **PivotTable Style Options**.

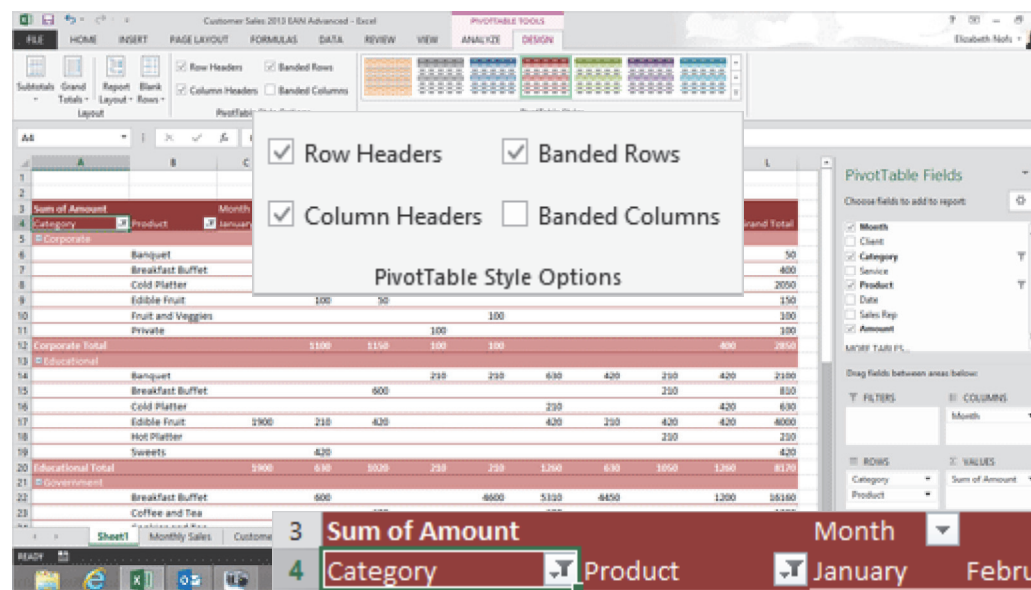
Select: **Banded Rows**.

What Do You See? In this example, the Banded Rows have been formatted with a bottom border.

OK, that about does the discussion on the PivotTable Design Ribbon.

Memo to Self: If you select Banded Columns, the Columns will be outlined with vertical borders as well.

PivotTable Tools ->Design-> PivotTable Style Options->Style



2

3	Sum of Amount	Month
4	Category	Product
5	Corporate	January
6	Banquet	50
7	Breakfast Buffet	
8	Cold Platter	950
9	Edible Fruit	100
10	Fruit and Veggies	
11	Private	
12	Corporate Total	1100

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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Format Data (PivotTable Styles)



PivotTable Options: Layout & Format

PivotTables have **Options**. The Options program everything from formatting the Columns when the data is updated to whether the Totals are shown.

1. Try it: Find the Layout & Format Options

The PivotTable is still selected.

Go to **PivotTable Tools ->Analyze->PivotTable**. Click on **Options**.

What Do You See? The PivotTable Options are:

Layout & Format
Totals & Filters
Display
Printing
Data
Alt Text

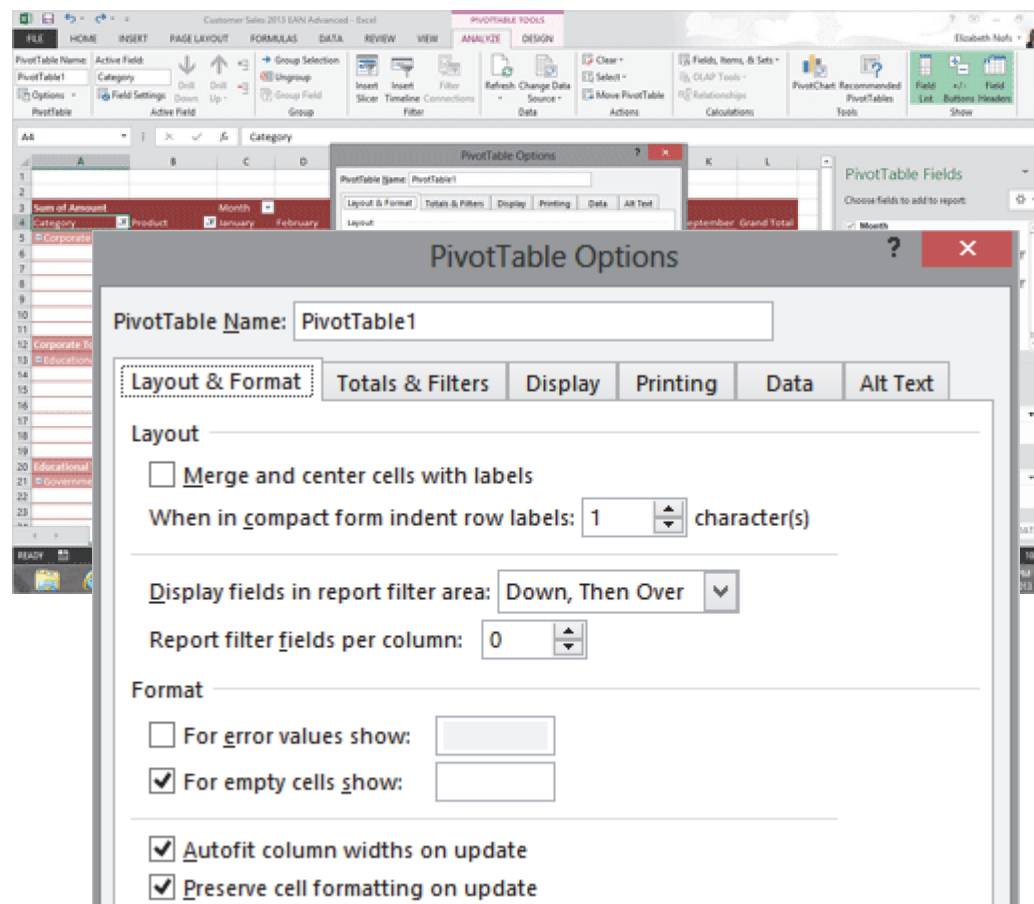
The Layout & Format options are shown:

In the **Layout** section the option to Merge and center cells is unchecked (by default).

In the **Format** section Autofit column width and Preserve cell formatting on update are both checked on (by default).

Keep going...

PivotTable Tools ->Analyze-> PivotTable-> Options



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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Modify Field Selections and Options (Layout & Format)



PivotTable Options: Totals & Filters

2. Try it: Find the Totals & Filters Options

The PivotTable is still selected.

Go to **PivotTable Tools ->Analyze->PivotTable**. Click on **Options**. Go to the **Totals & Filters** tab.

The Totals & Filters options are shown:

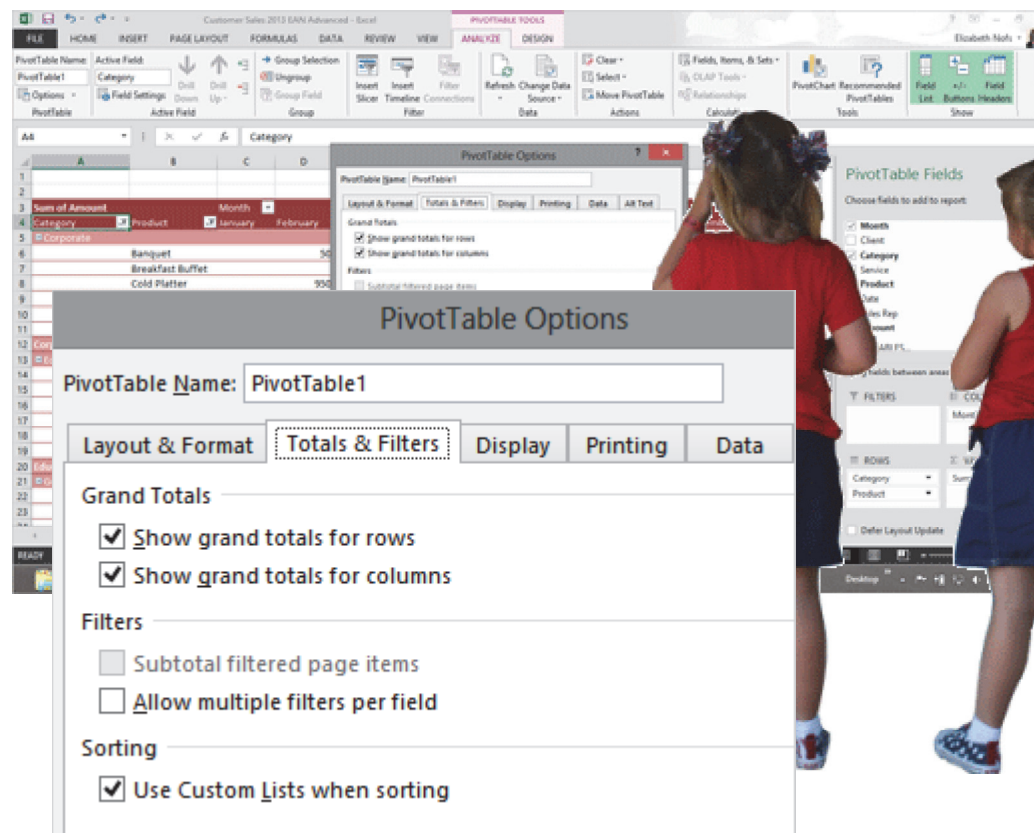
In the **Grand Totals** section the option to Show grand totals is checked on for both rows and columns (by default).

In the **Filters** section the option to Allow multiple filters per field is not checked on.

In the **Sorting** section the option to Use Custom Lists when sorting is checked on. We use Custom Lists to sort months in chronologically (January, February, March) not alphabetically.

Keep going...

PivotTable Tools ->Analyze-> PivotTable-> Options



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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Modify Field Selections and Options (Totals & Filters)



PivotTable Options: Display

3. Try it: Find the Totals & Filters Options

The PivotTable is still selected.

The **Options** are open. Go to the **Display** tab.

The Display options are shown:

In the **Display** section the default options are:

Show expand/collapse buttons

Show contextual tooltips (help stuff)

Display field captions and filter drop downs

You can select Classic PivotTable layout (the old way). You can also Show the Values Row.

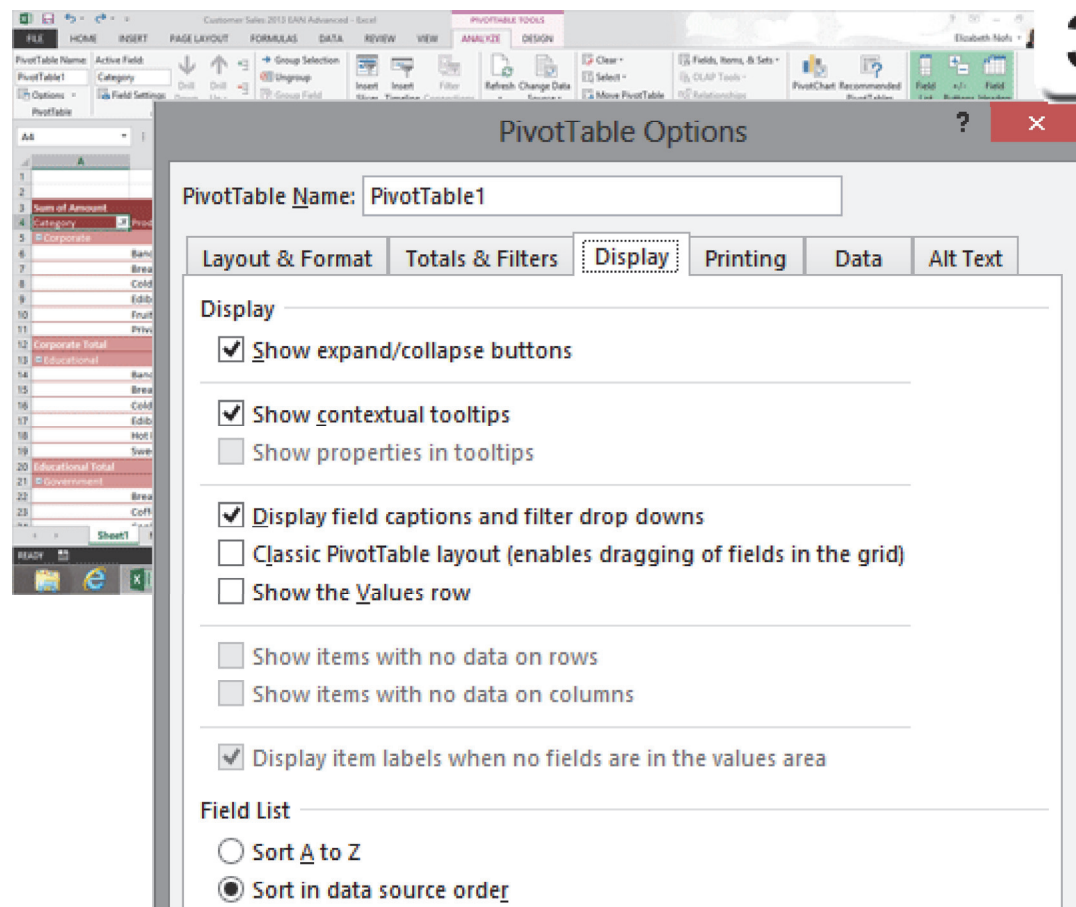
In the **Field List** section the default option is to Sort in data source order. For example you could sort by the Categories in our little PivotTable.

That's enough for now.

Click **OK** to close the PivotTable Options.

Save your work.

PivotTable Tools -> Analyze -> PivotTable -> Options



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4. Create Advanced Charts and Tables

4.2 Create and Manage PivotTables: Modify Field Selections and Options (Display)



PivotTable: Summary

This lesson looked at PivotTables and the PivotTable Tools. In the next lesson, we will investigate the options for PivotCharts.

OK, OK. Allez allez in free. You done good.
Go get a cookie!



3	Sum of Amount	Month
4	Category	Product
5	Corporate	
6		Banquet
7		Breakfast Buffet
8		Cold Platter
9		Edible Fruit
10		Fruit and Veggies
11		Private
12	Corporate Total	

The screenshot shows an Excel spreadsheet with a PivotTable. The PivotTable has 'Category' as the row field and 'Month' as the column field. The data is summarized by 'Sum of Amount'. The PivotTable Fields task pane on the right shows the following configuration:

- Filters:** None
- Columns:** Month
- Rows:** Category, Product
- Values:** Sum of Amount

Drag fields between areas below:

FILTERS

COLUMNS

Month

ROWS

VALUES

Category

Sum of Amount

Product



Practice Activities

Lesson 3: What Happened? (PivotTables)

Before You Begin: Download the sample spreadsheet: [Brown Bag Lunch Sales Team.xlsx](#).

Try This: Do the following steps

1. Open the spreadsheet: [Brown Bag Lunch Sales Team.xlsx](#).
2. Go to Sheet 1. Select Row 1 and remove the Filters.
3. Select Sheet 1 and Insert a PivotTable on a New Worksheet.
4. Use the PivotTable Tools to Show the Field List
5. Edit the PivotTable Field list as follows:
Select the Field: Market (It should be placed in the Rows, by default).
6. Drag the Field Sales to the Values (It should be placed in the Values as Count of Sales)
Change **Count of Sales** to **Sum of Sales**
7. Select the Field: Sales Agent (It should be placed in the Rows, by default).
8. Move the Field: Sales Agent from the Rows to the Columns
9. Format Column B:G for Accounting.
10. Save this as YOUR NAME What Happened Practice.





Test Yourself



1. Which Ribbon has the command for creating Pivot Tables?

- a. Home
- b. Insert
- c. Data
- d. Review

Tip: Advanced Excel, page 87

2. Which are Pivot Table Tools Ribbons? (Select all correct answers.)

- a. Analyze
- b. Design
- c. View
- d. Format

Tip: Advanced Excel, page 89

3. Where do the Pivot Table fields come from?

- a. Entered in the Pivot Table dialogue box
- b. The spreadsheet labels
- c. Default in Excel

Tip: Advanced Excel, page 90

4. The row labels in a Pivot Table are filters.

- a. True
- b. False

Tip: Advanced Excel, page 93

5. Which of the following are functions a Pivot Table can use?

(Select all correct answers.)

- a. Count Numbers
- b. Sum
- c. Average
- d. Max
- e. Min
- f. Product

Tip: Advanced Excel, page 97

6. Which of the following are true about subtotals in Pivot Tables?

(Select all correct answers.)

- a. Default is to show the subtotal at the top of the group
- b. Command is Pivot Tables-> Tools-> Design> Layout-> Subtotals
- c. Subtotals cannot be removed

Tip: Advanced Excel, page 104

7. Which of the following is an option for Grand Totals? (Select all correct answers.)

- a. Added to Rows
- b. Added to Columns
- c. Added to both Rows and Columns
- d. Added to neither Rows or Columns

Tip: Advanced Excel, page 106

8. Which of the following are report options? (Select all correct answers.)

- a. Show in Compact form
- b. Show in Outline form
- c. Show in Tabular form

Tip: Advanced Excel, page 110

9. A Pivot Table can be formatted with Styles

- a. True
- b. False

Tip: Advanced Excel, page 111

