

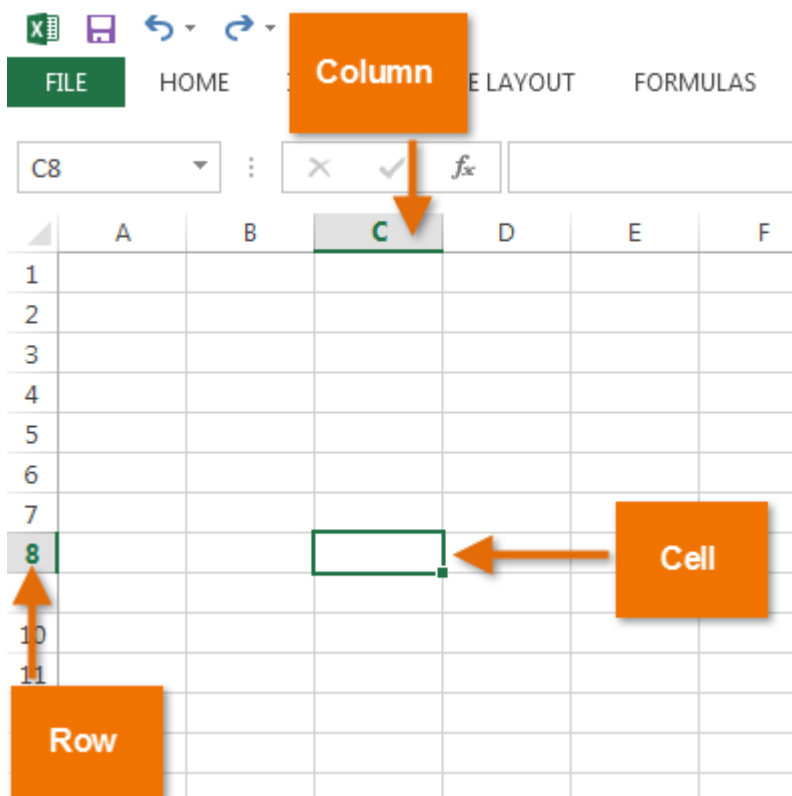
# Cell Basics

Whenever you work with Excel, you'll enter information—or **content**—into **cells**. Cells are the basic building blocks of a worksheet. You'll need to learn the basics of **cells** and **cell content** to calculate, analyze, and organize data in Excel.

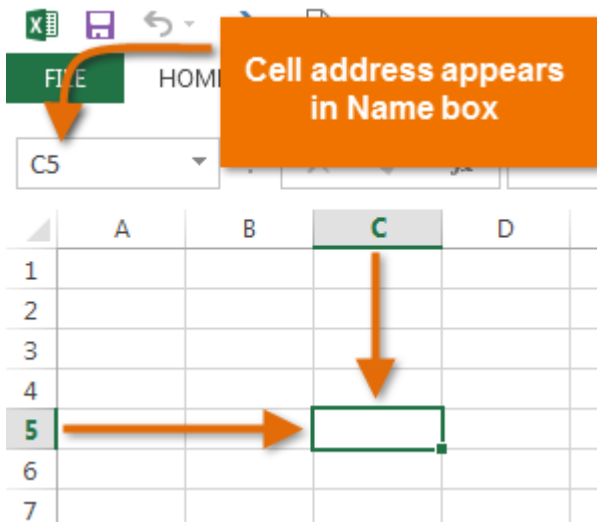
Practice document: [Excel2013\\_CellBasics\\_Practice.xlsx](#)

## Understanding cells

Every worksheet is made up of thousands of rectangles, which are called **cells**. A cell is the **intersection** of a **row** and a **column**. Columns are identified by **letters (A, B, C)**, while rows are identified by **numbers (1, 2, 3)**.



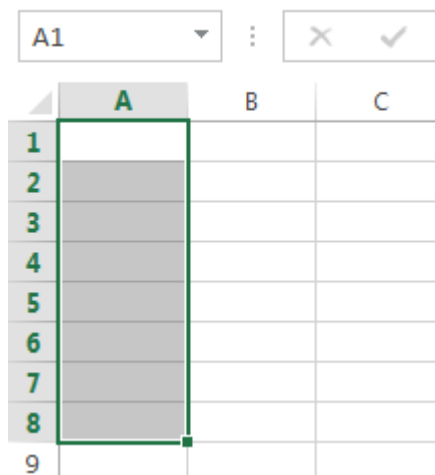
Each cell has its own **name**—or **cell address**—based on its column and row. In this example, the selected cell intersects **column C** and **row 5**, so the cell address is **C5**. The cell address will also appear in the **Name box**. Note that a cell's **column** and **row headings** are **highlighted** when the cell is selected.



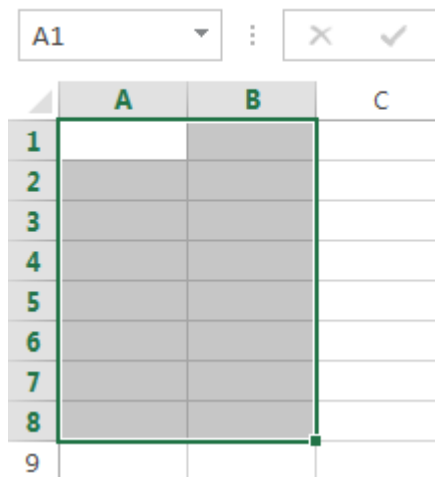
You can also select **multiple cells** at the same time. A group of cells is known as a **cell range**. Rather than a single cell address, you will refer to a cell range using the cell addresses of the **first** and **last** cells in the cell range, separated by a **colon**. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as **A1:A5**.

In the images below, two different cell ranges are selected:

- Cell range **A1:A8**




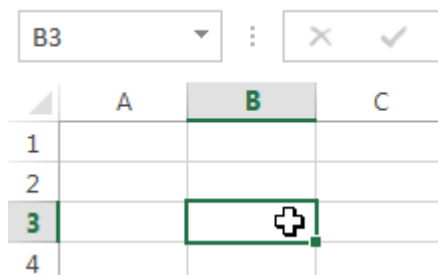
- Cell range **A1:B8**



## To select a cell:

To input or edit cell content, you'll first need to **select** the cell.

1. Click a **cell** to select it.
2. A **border**  will appear around the selected cell, and the **column heading** and **row heading** will be highlighted. The cell will remain **selected** until you click another cell in the worksheet.

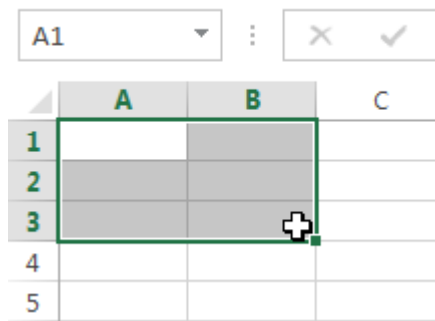


You can also select cells using the **arrow keys** on your keyboard.

## To select a cell range:

Sometimes you may want to select a larger group of cells, or a **cell range**.

1. Click, hold, and drag the mouse until all of the **adjoining cells** you want to select are **highlighted**.
2. Release the mouse to **select** the desired cell range. The cells will remain **selected** until you click another cell in the worksheet.



## Cell content

Any information you enter into a spreadsheet will be stored in a cell. Each cell can contain different types of **content**, including **text**, **formatting**, **formulas**, and **functions**.

- **Text**

Cells can contain **text**, such as letters, numbers, and dates.

	A	B	C
1	Date	Sales	Percentage of Total
2	5/6/2013	65	0.71
3	5/7/2013	78	0.78
4	5/8/2013	112	0.86
5	5/9/2013	54	0.28
6	5/10/2013	99	0.49
7	5/11/2013	189	0.65
8	5/12/2013	120	0.57
9			

- **Formatting attributes**

Cells can contain **formatting attributes** that change the way letters, numbers, and dates are **displayed**. For example, percentages can appear as 0.15 or 15%. You can even change a cell's **background color**.

	A	B	C
1	Date	Sales	Percentage of Total
2	Monday, May 06, 2013	\$ 65.00	71%
3	Tuesday, May 07, 2013	\$ 78.00	78%
4	Wednesday, May 08, 2013	\$ 112.00	86%
5	Thursday, May 09, 2013	\$ 54.00	28%
6	Friday, May 10, 2013	\$ 99.00	49%
7	Saturday, May 11, 2013	\$ 189.00	65%
8	Sunday, May 12, 2013	\$ 120.00	57%
9			

- **Formulas and functions**

Cells can contain **formulas** and **functions** that calculate cell values. In our example, SUM(B2:B8) adds the value of each cell in cell range B2:B8 and displays the total in cell B9.

	A	B	C
	Date	Sales	Percentage of Total
1			
2	Monday, May 06, 2013	\$ 65.00	71%
3	Tuesday, May 07, 2013	\$ 78.00	78%
4	Wednesday, May 08, 2013	\$ 112.00	86%
5	Thursday, May 09, 2013	\$ 54.00	28%
6	Friday, May 10, 2013	\$ 99.00	49%
7	Saturday, May 11, 2013	\$ 189.00	65%
8	Sunday, May 12, 2013	\$ 120.00	57%
9	Weekly Sales	\$ 717.00	

## To insert content:

1. Click a **cell** to select it.

	A	B	C
1			
2			

2. Type **content** into the selected cell, then press **Enter** on your keyboard. The content will appear in the **cell** and the **formula bar**. You can also input and edit cell content in the formula bar.

	A	B	C	D	E	F
1	First					
2						
3						
4						
5						
6						
7						

Content appears in cell and formula bar

## To delete cell content:

1. Select the **cell** with content you want to delete.

	A	B	C
1			
2	First Name	Middle Name	Last Name
3	Heidi	Lauren	Lee
4	Josie	Marie	Gates
5	Wendy	Anne	Crocker
6	Loretta	Susan	Johnson

2. Press the **Delete** or **Backspace** key on your keyboard. The cell's contents will be deleted.

	A	B	C
1			
2	First Name	Middle Name	Last Name
3	Heidi		Lee
4	Josie	Marie	Gates
5	Wendy	Anne	Crocker
6	Loretta	Susan	Johnson

You can use the **Delete** key on your keyboard to delete content from **multiple cells** at once. The Backspace key will only delete one cell at a time.

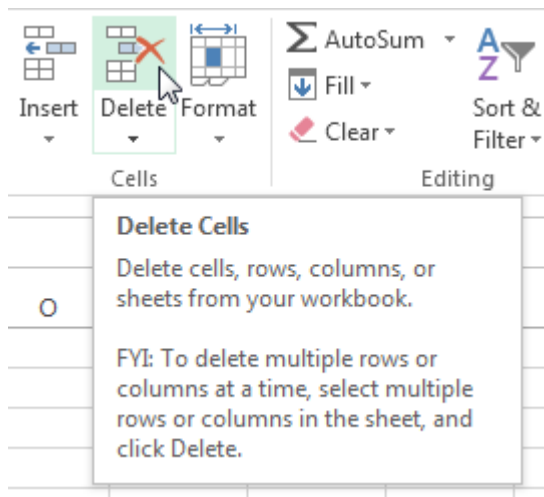
## To delete cells:

There is an important difference between **deleting the content of a cell** and **deleting the cell itself**. If you delete the entire cell, the cells below it will **shift up** and replace the deleted cells.

1. Select the **cell(s)** you want to delete.

	A	B	C
1			
2	First Name	Middle Name	Last Name
3	Heidi	Joy	Lee
4	Josie	Marie	Gates
5	Wendy	Anne	Crocker
6	Loretta	Susan	Johnson

2. Select the **Delete** command from the **Home** tab on the **Ribbon**.



- The cells below will **shift up**.

	A	B	C
1	First Name	Middle Name	Last Name
2	Heidi	Joy	Lee
3	Josie	Marie	Gates
4	Wendy	Anne	Crocker
5	Loretta	Susan	Johnson

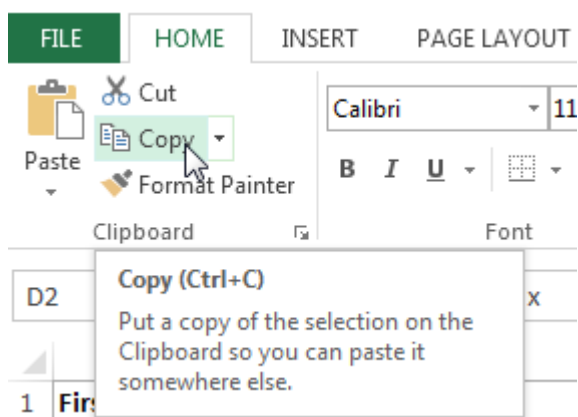
## To copy and paste cell content:

Excel allows you to **copy** content that is already entered into your spreadsheet and **paste** that content to other cells, which can save you time and effort.

- Select the **cell(s)** you want to **copy**.

D	E
Friday, March 01, 2013	Friday, March 08, 2013
x	

- Click the **Copy** command on the **Home** tab, or press **Ctrl+C** on your keyboard.

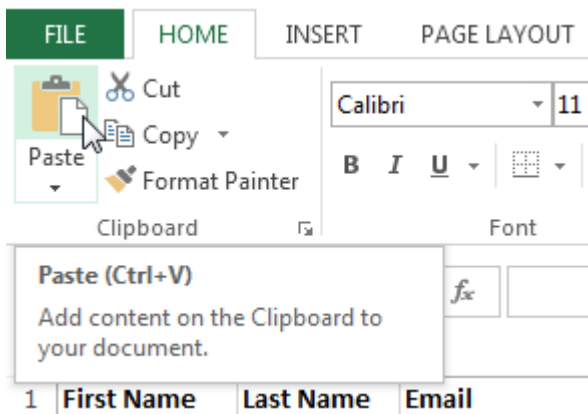


3. Select the **cell(s)** where you want to **paste** the content. The copied cells will now have a **dashed box** around them.

D	E
Friday, March 01, 2013	Friday, March 08, 2013
x	

Diagram illustrating the selection of a paste destination cell. An orange box labeled "Copied cell" points to the cell containing "x" in column D. Another orange box labeled "Paste destination" points to the empty cell in column E. A dashed green box highlights the selected cell in column E.

4. Click the **Paste** command on the **Home** tab, or press **Ctrl+V** on your keyboard.



5. The content will be **pasted** into the selected cells.

D	E
Friday, March 01, 2013	Friday, March 08, 2013
x	x

Diagram illustrating the result of pasting. The content "x" from the copied cell in column D has been pasted into the selected cell in column E. A dashed green box highlights the pasted content in column E.

## To cut and paste cell content:

Unlike copying and pasting, which **duplicates** cell content, **cutting** allows you to **move** content between cells.

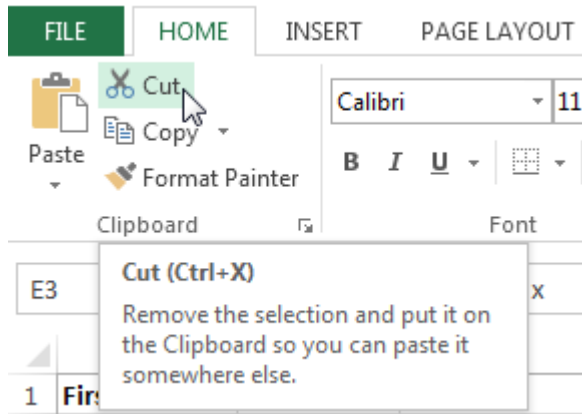
1. Select the **cell(s)** you want to **cut**.

D	E
Friday, March 01, 2013	Friday, March 08, 2013
x	x
	x
	x
	x

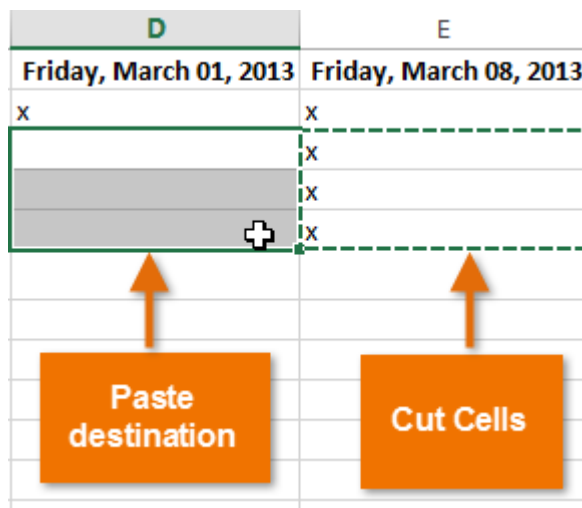
Diagram illustrating the selection of a cell to be cut. The cell containing "x" in column E is selected, indicated by a dashed green box and a white crosshair cursor.



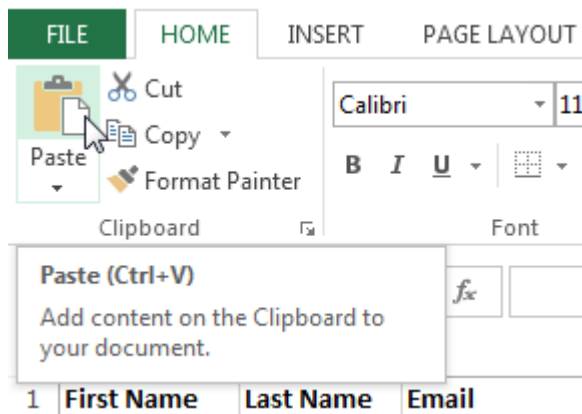
2. Click the **Cut** command on the **Home** tab, or press **Ctrl+X** on your keyboard.



3. Select the cells where you want to **paste** the content. The cut cells will now have a **dashed box** around them.



4. Click the **Paste** command on the **Home** tab, or press **Ctrl+V** on your keyboard.



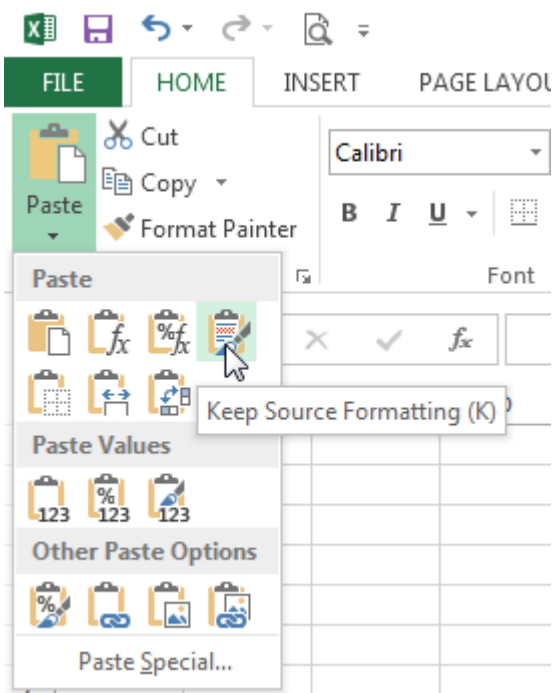
5. The cut content will be **removed** from the original cells and **pasted** into the selected cells.

D	E
<b>Friday, March 01, 2013</b>	<b>Friday, March 08, 2013</b>
x	x
x	
x	
x	

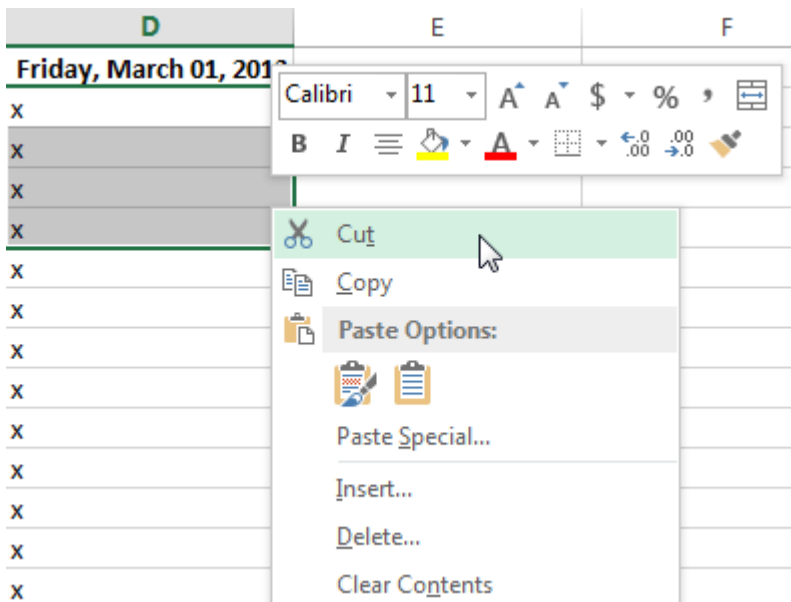
## To access more paste options:

You can also access **additional paste options**, which are especially convenient when working with cells that contain **formulas** or **formatting**.

- To access more paste options, click the **drop-down arrow** on the **Paste** command.





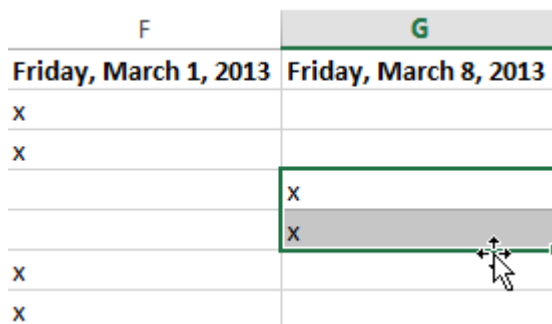
Rather than choose commands from the Ribbon, you can access commands quickly by **right-clicking**. Simply select the **cell(s)** you want to **format**, then right-click the mouse. A **drop-down menu** will appear, where you'll find several **commands** that are also located on the Ribbon.



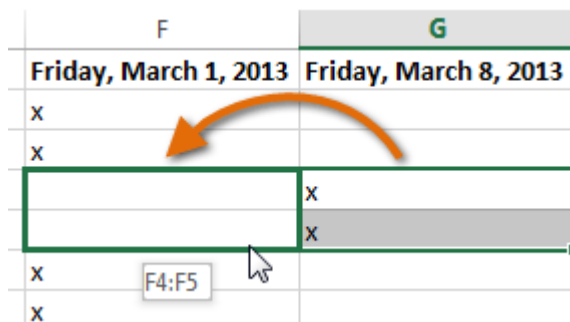
## To drag and drop cells:

Rather than cutting, copying, and pasting, you can **drag and drop** cells to move their contents.

1. Select the **cell(s)** you want to **move**.
2. Hover the mouse over the **border** of the selected cell(s) until the cursor changes from a **white cross**  to a **black cross with four arrows** .



3. Click, hold, and drag the cells to the **desired location**.



4. Release the mouse, and the cells will be **dropped** in the selected location.


F	G
Friday, March 1, 2013	Friday, March 8, 2013
x	
x	
x	
x	
x	
x	

## To use the fill handle:

There may be times when you need to copy the content of one cell to several other cells in your worksheet. You could **copy and paste** the content into each cell, but this method would be time consuming. Instead, you can use the **fill handle** to quickly copy and paste content to **adjacent cells** in the same row or column.

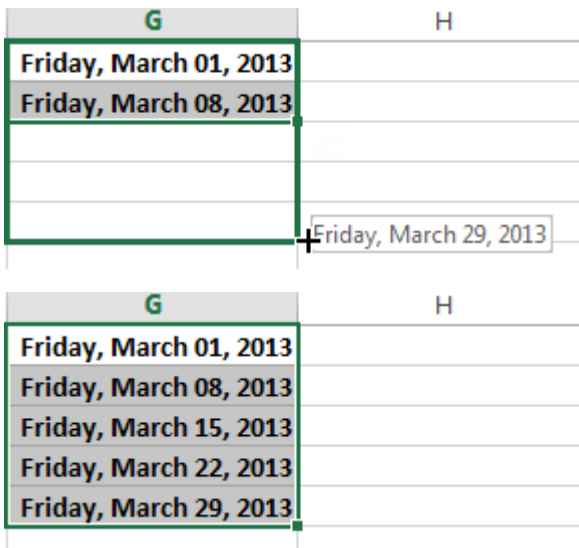
1. Select the **cell(s)** containing the content you want to use. The **fill handle** will appear as a small square in the bottom-right corner of the selected cell(s).

D	E
Friday, March 01, 2013	Friday, March 08, 2013
x	
x	
x	
x	


  
**The fill handle**

2. Click, hold, and drag the **fill handle** until all of the cells you want to fill are **selected**.





You can also **double-click** the fill handle instead of clicking and dragging. This can be useful with larger spreadsheets, where clicking and dragging may be awkward.

Watch the video below to see an example of double-clicking the fill handle.


## To use Flash Fill:

A new feature in Excel 2013, **Flash Fill** can enter data automatically into your worksheet, saving you time and effort. Just like the fill handle, **Flash Fill** can guess what type of information you're entering into your worksheet. In the example below, we'll use Flash Fill to create a list of **first names** using a list of existing **email addresses**.


1. Enter the desired information into your worksheet. A **Flash Fill preview** will appear below the selected cell whenever Flash Fill is available.



	A	B	C	D
1	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>	<b>Friday, March 01, 2013</b>
2	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi	x
3	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie	x
4	<a href="mailto:wendy.crocker@vestainsurance.com">wendy.crocker@vestainsurance.com</a>	Crocker	Wendy	x
5	<a href="mailto:loretta.johnson@vestainsurance.com">loretta.johnson@vestainsurance.com</a>	Johnson	Loretta	x
6	<a href="mailto:walter.rivera@vestainsurance.com">walter.rivera@vestainsurance.com</a>	Rivera	Walter	x
7	<a href="mailto:misty.whitfield@vestainsurance.com">misty.whitfield@vestainsurance.com</a>	Whitfield	Misty	x
8	<a href="mailto:matilda.lewis@vestainsurance.com">matilda.lewis@vestainsurance.com</a>	Lewis	Matilda	x
9	<a href="mailto:elizabeth.hicks@vestainsurance.com">elizabeth.hicks@vestainsurance.com</a>	Hicks	Elizabeth	x
10	<a href="mailto:alvin.rios@vestainsurance.com">alvin.rios@vestainsurance.com</a>	Rios	Alvin	x
11	<a href="mailto:brian.gaines@vestainsurance.com">brian.gaines@vestainsurance.com</a>	Gaines	Brian	x

2. Press **Enter**. The Flash Fill data will be **added** to the worksheet.

	A	B	C	D
1	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>	<b>Friday, March 01, 2013</b>
2	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi	x
3	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie	x
4	<a href="mailto:wendy.crocker@vestainsurance.com">wendy.crocker@vestainsurance.com</a>	Crocker	Wendy	
5	<a href="mailto:loretta.johnson@vestainsurance.com">loretta.johnson@vestainsurance.com</a>	Johnson	Loretta	x
6	<a href="mailto:walter.rivera@vestainsurance.com">walter.rivera@vestainsurance.com</a>	Rivera	Walter	x
7	<a href="mailto:misty.whitfield@vestainsurance.com">misty.whitfield@vestainsurance.com</a>	Whitfield	Misty	x
8	<a href="mailto:matilda.lewis@vestainsurance.com">matilda.lewis@vestainsurance.com</a>	Lewis	Matilda	x
9	<a href="mailto:elizabeth.hicks@vestainsurance.com">elizabeth.hicks@vestainsurance.com</a>	Hicks	Elizabeth	x
10	<a href="mailto:alvin.rios@vestainsurance.com">alvin.rios@vestainsurance.com</a>	Rios	Alvin	x
11	<a href="mailto:brian.gaines@vestainsurance.com">brian.gaines@vestainsurance.com</a>	Gaines	Brian	x

To **modify** or **undo** Flash Fill, click the **Flash Fill button** next to recently added Flash Fill data.

	A	B	C	D
1	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>	<b>Friday, March 01, 2013</b>
2	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi	x
3	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie	x
4	<a href="mailto:wendy.crocker@vestainsurance.com">wendy.crocker@vestainsurance.com</a>	Crocker	Wendy	
5	<a href="mailto:loretta.johnson@vestainsurance.com">loretta.johnson@vestainsurance.com</a>			
6	<a href="mailto:walter.rivera@vestainsurance.com">walter.rivera@vestainsurance.com</a>			
7	<a href="mailto:misty.whitfield@vestainsurance.com">misty.whitfield@vestainsurance.com</a>			
8	<a href="mailto:matilda.lewis@vestainsurance.com">matilda.lewis@vestainsurance.com</a>			
9	<a href="mailto:elizabeth.hicks@vestainsurance.com">elizabeth.hicks@vestainsurance.com</a>			
10	<a href="mailto:alvin.rios@vestainsurance.com">alvin.rios@vestainsurance.com</a>	Rios	Alvin	x

-  Undo Flash Fill
-  Accept suggestions
- Select all 0 blank cells
- Select all 76 changed cells

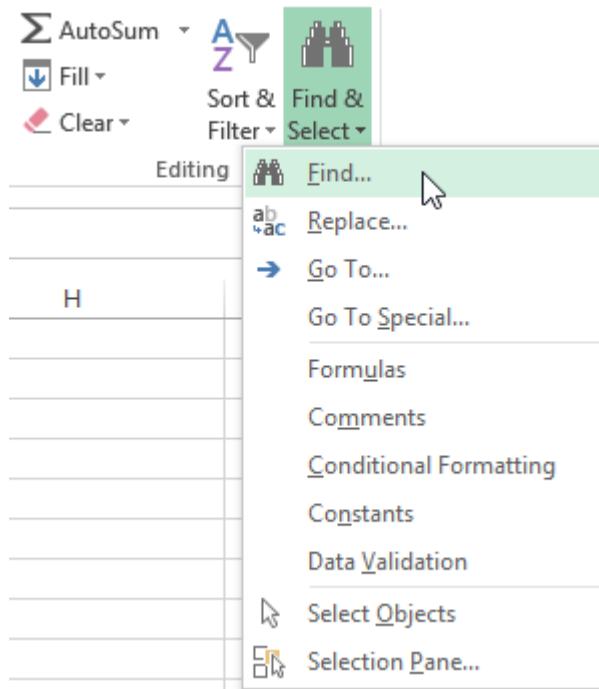
## Find and Replace

When working with a lot of data in Excel, it can be difficult and time consuming to locate specific information. You can easily search your workbook using the **Find** feature, which also allows you to modify content using the **Replace** feature.

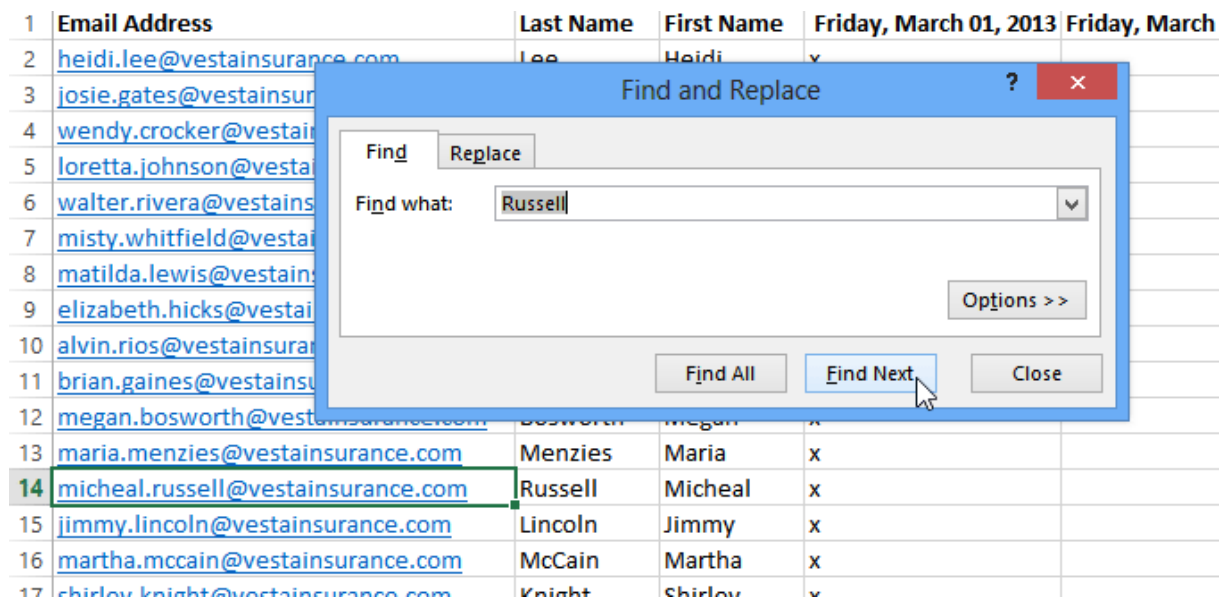
### To find content:

In our example, we'll use the Find command to locate a specific name in a long list of employees.

1. From the **Home** tab, click the **Find and Select** command, then select **Find...** from the drop-down menu.

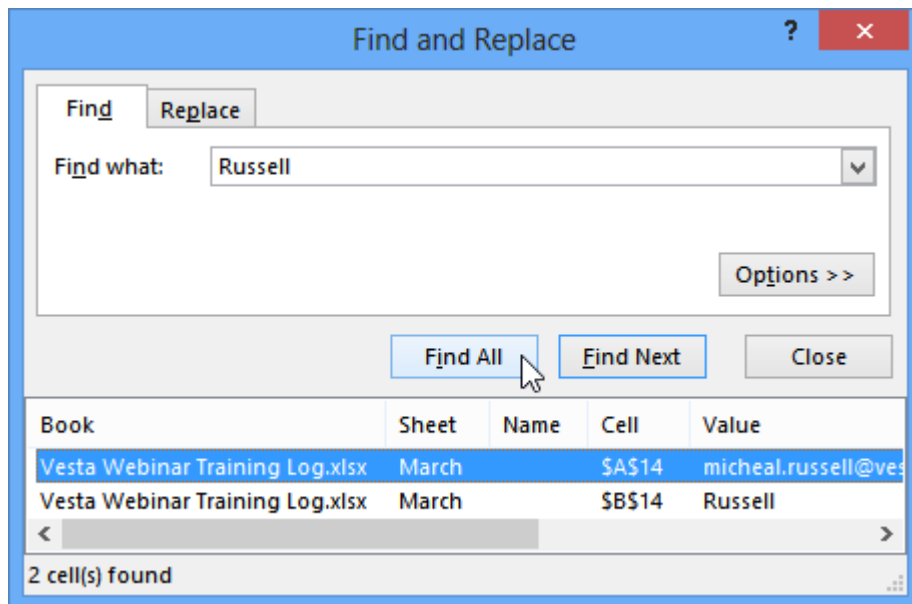


2. The **Find and Replace** dialog box will appear. Enter the **content** you want to find. In our example, we'll type the employee's name.
3. Click **Find Next**. If the content is found, the cell containing that content will be **selected**.

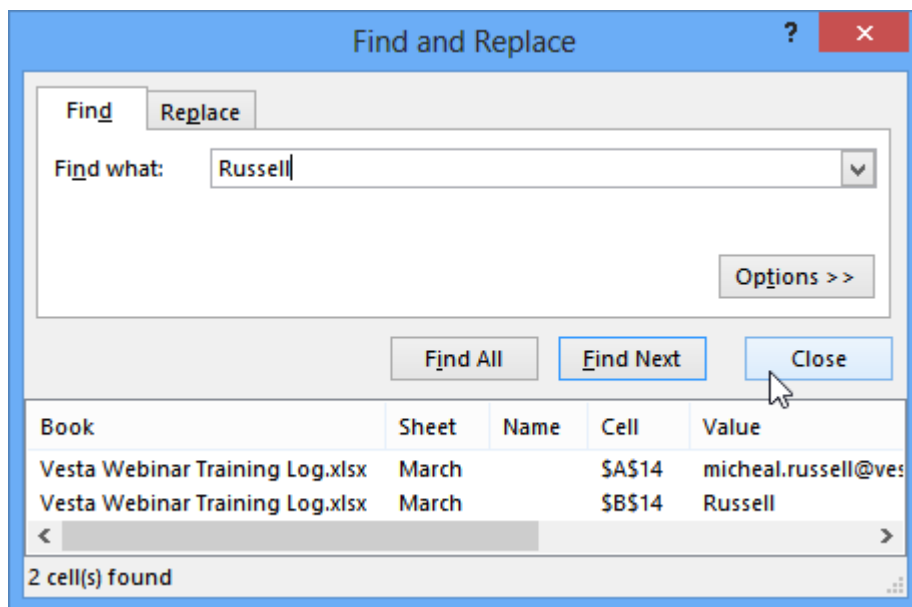


4. Click **Find Next** to find further instances or **Find All** to see every instance of the search term.



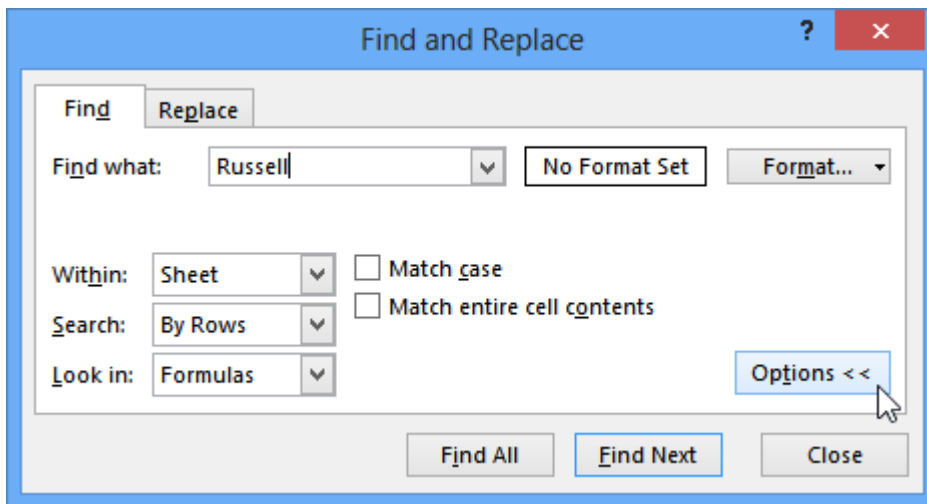


5. When you are finished, click **Close** to exit the Find and Replace dialog box.



You can also access the Find command by pressing **Ctrl+F** on your keyboard.

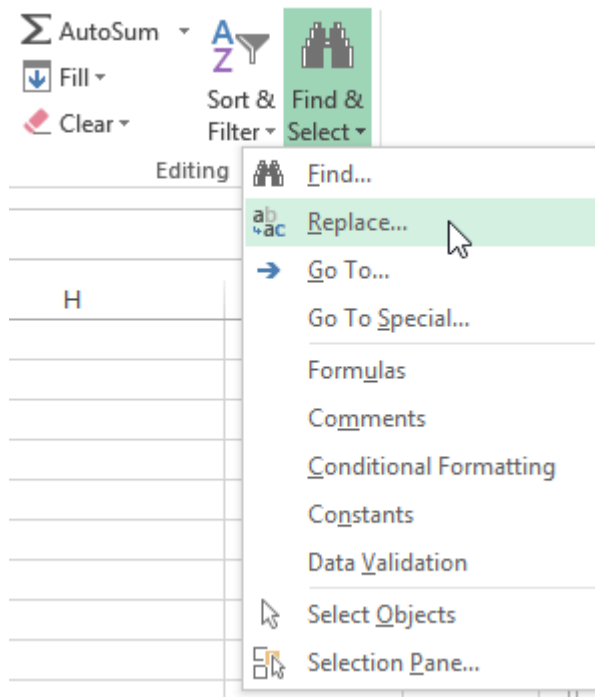
Click **Options** to see advanced search criteria in the Find and Replace dialog box.



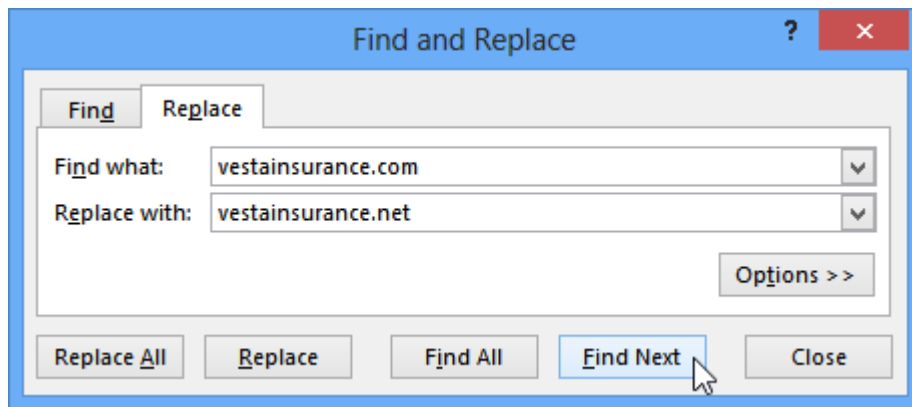
## To replace cell content:

At times, you may discover that you've repeatedly made a mistake throughout your workbook (such as misspelling someone's name), or that you need to exchange a particular word or phrase for another. You can use Excel's **Find and Replace** feature to make quick revisions. In our example, we'll use Find and Replace to correct a list of email addresses.

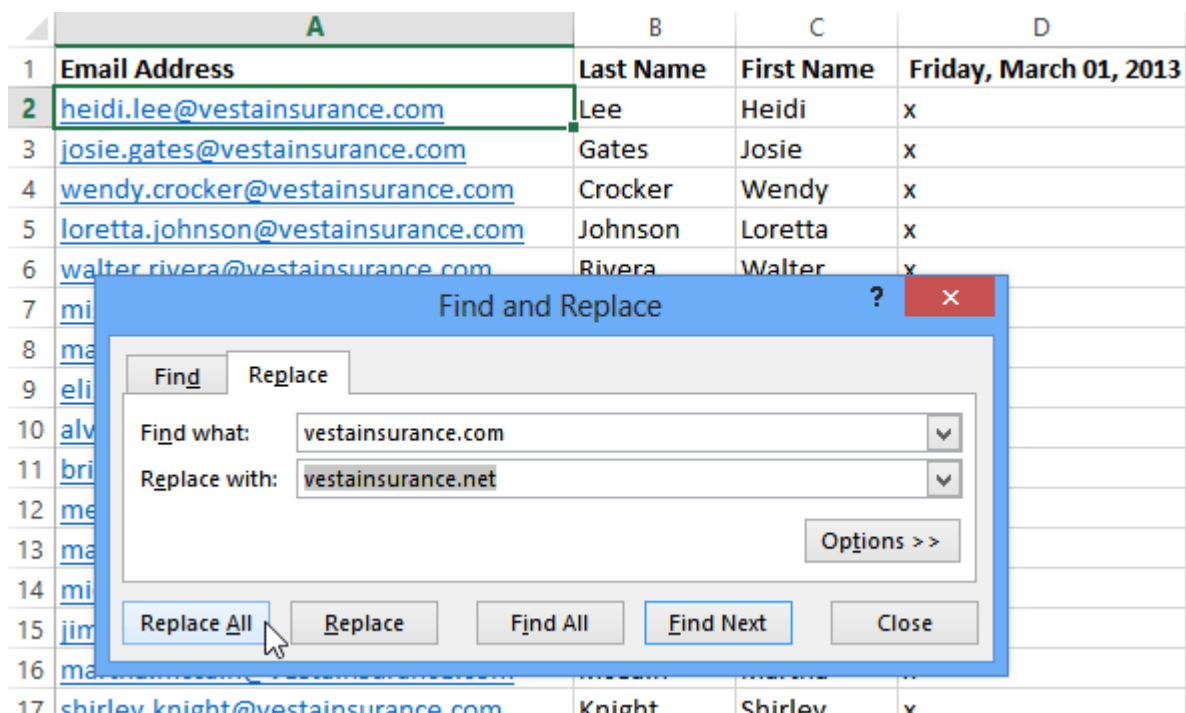
1. From the **Home** tab, click the **Find and Select** command, then select **Replace...** from the drop-down menu.



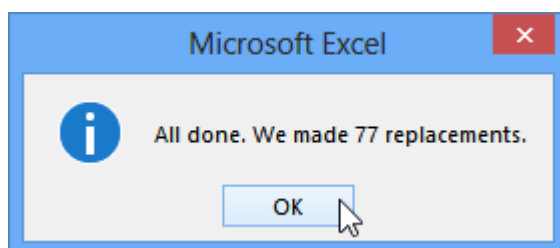
2. The **Find and Replace** dialog box will appear. Type the text you want to find in the **Find what:** field.
3. Type the text you want to replace it with in the **Replace with:** field, then click **Find Next**.



4. If the content is found, the cell containing that content will be **selected**.
5. **Review** the text to make sure you want to replace it.
6. If you want to replace it, select one of the **replace** options:
  - o **Replace** will replace individual instances.
  - o **Replace All** will replace every instance of the text throughout the workbook. In our example, we'll choose this option to save time.



7. A dialog box will appear, confirming the number of replacements made. Click **OK** to continue.



8. The selected cell content will be **replaced**.

5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie
7	<a href="mailto:wendy.crocker@vestainsurance.com">wendy.crocker@vestainsurance.com</a>	Crocker	Wendy
8	<a href="mailto:loretta.johnson@vestainsurance.com">loretta.johnson@vestainsurance.com</a>	Johnson	Loretta
9	<a href="mailto:walter.rivera@vestainsurance.com">walter.rivera@vestainsurance.com</a>	Rivera	Walter
10	<a href="mailto:misty.whitfield@vestainsurance.com">misty.whitfield@vestainsurance.com</a>	Whitfield	Misty
11	<a href="mailto:matilda.lewis@vestainsurance.com">matilda.lewis@vestainsurance.com</a>	Lewis	Matilda
12	<a href="mailto:elizabeth.hicks@vestainsurance.com">elizabeth.hicks@vestainsurance.com</a>	Hicks	Elizabeth

5	<a href="mailto:heidi.lee@vestainsurance.net">heidi.lee@vestainsurance.net</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.net">josie.gates@vestainsurance.net</a>	Gates	Josie
7	<a href="mailto:wendy.crocker@vestainsurance.net">wendy.crocker@vestainsurance.net</a>	Crocker	Wendy
8	<a href="mailto:loretta.johnson@vestainsurance.net">loretta.johnson@vestainsurance.net</a>	Johnson	Loretta
9	<a href="mailto:walter.rivera@vestainsurance.net">walter.rivera@vestainsurance.net</a>	Rivera	Walter
10	<a href="mailto:misty.whitfield@vestainsurance.net">misty.whitfield@vestainsurance.net</a>	Whitfield	Misty
11	<a href="mailto:matilda.lewis@vestainsurance.net">matilda.lewis@vestainsurance.net</a>	Lewis	Matilda
12	<a href="mailto:elizabeth.hicks@vestainsurance.net">elizabeth.hicks@vestainsurance.net</a>	Hicks	Elizabeth

9. When you are finished, click **Close** to exit the Find and Replace dialog box.

	A	B	C	D
1	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>	<b>Friday, March 01, 2013</b>
2	<a href="mailto:heidi.lee@vestainsurance.net">heidi.lee@vestainsurance.net</a>	Lee	Heidi	x
3	<a href="mailto:josie.gates@vestainsurance.net">josie.gates@vestainsurance.net</a>	Gates	Josie	x
4	<a href="mailto:wendy.crocker@vestainsurance.net">wendy.crocker@vestainsurance.net</a>	Crocker	Wendy	x
5	<a href="mailto:loretta.johnson@vestainsurance.net">loretta.johnson@vestainsurance.net</a>	Johnson	Loretta	x
6	<a href="mailto:walter.rivera@vestainsurance.net">walter.rivera@vestainsurance.net</a>	Rivera	Walter	x
7	<a href="mailto:misty.whitfield@vestainsurance.net">misty.whitfield@vestainsurance.net</a>	Whitfield	Misty	x
8	<a href="mailto:matilda.lewis@vestainsurance.net">matilda.lewis@vestainsurance.net</a>	Lewis	Matilda	x
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19	<a href="mailto:andy.knott@vestainsurance.net">andy.knott@vestainsurance.net</a>	Knott	Andy	x

Find and Replace ? X

Find what:  v

Replace with:  v

## Challenge!

1. Open the practice document Excel2013\_CellBasics\_Practice.xlsx.
2. Select cell D3. Notice how the **cell address** appears in the **Name box** and its **content** appears in both the cell and the **Formula bar**.
3. Select a cell, and try inserting **text** and **numbers**.
4. **Delete** a cell, and note how the cells below **shift up** to fill in its place.

5. **Cut** cells and **paste** them into a different location. Cut cells **D4:D6** and paste them to **E4:E6**.
6. Try **dragging** and **dropping** some cells to other parts of the worksheet.
7. Use the **fill handle** to fill in data to adjoining cells both vertically and horizontally. Use the fill handle to **continue the series** of dates across row 3.
8. Use the **Find** feature to locate content in your workbook. Type the name **Lewis** into the **Find what:** field.

## Formatting Cells

All cell content uses the same **formatting** by default, which can make it difficult to read a workbook with a lot of information. Basic formatting can customize the **look and feel** of your workbook, allowing you to draw attention to specific sections and making your content easier to view and understand. You can also apply **number formatting** to tell Excel exactly what type of data you're using in the workbook, such as percentages (%), currency (\$), and so on

Practice document: Excel2013\_FormatCells\_Practice.xlsx.

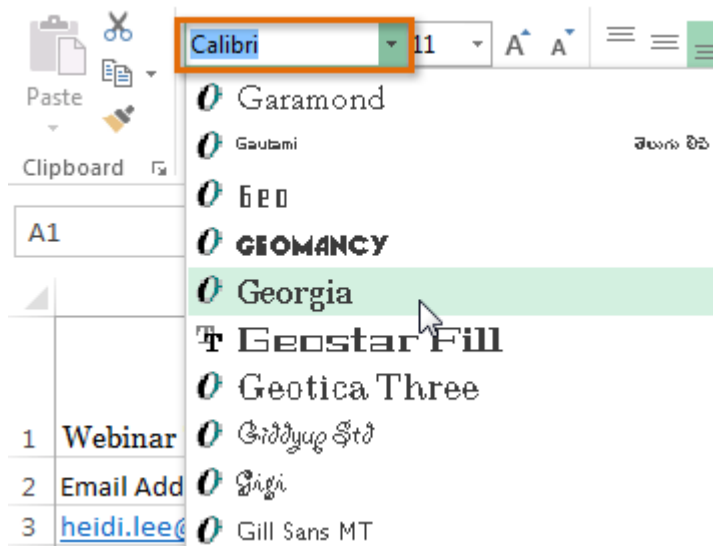
### To change the font:

By default, the font of each new workbook is set to Calibri. However, Excel provides many other fonts you can use to customize your cell text. In the example below, we'll format our **title cell** to help distinguish it from the rest of the worksheet.

1. Select the **cell(s)** you want to modify.

	A	B
1	Webinar Training Log	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

2. Click the **drop-down arrow** next to the **Font** command on the **Home** tab. The **Font** drop-down menu will appear.
3. Select the desired **font**. A **live preview** of the new font will appear as you hover the mouse over different options. In our example, we'll choose **Georgia**.



- The text will change to the **selected font**.

	A	B
1	<b>Webinar Training Log</b>	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

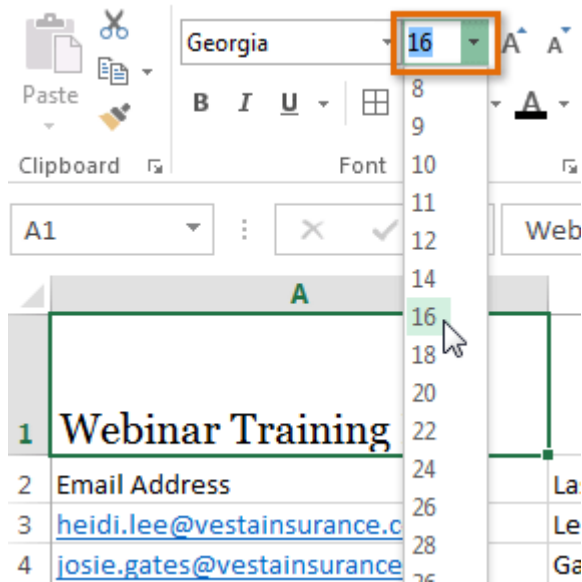
When creating a workbook in the workplace, you'll want to select a font that is easy to read. Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.

## To change the font size:

- Select the **cell(s)** you want to modify.

	A	B
1	<b>Webinar Training Log</b>	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

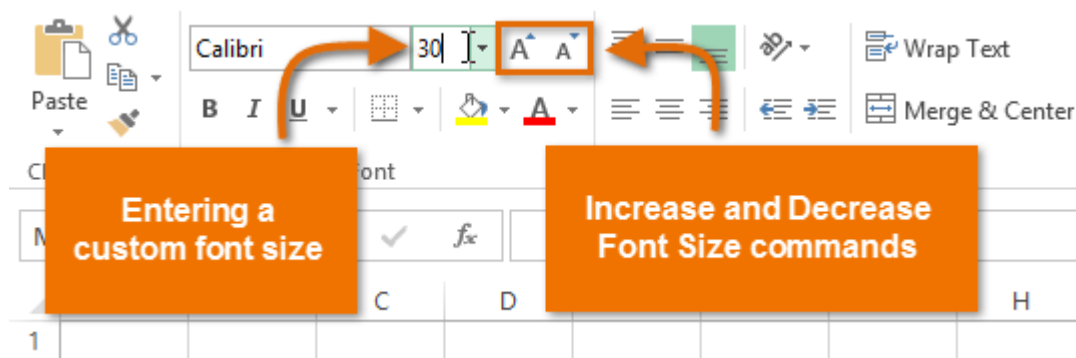
- Click the **drop-down arrow** next to the **Font Size** command on the **Home** tab. The **Font Size** drop-down menu will appear.
- Select the desired **font size**. A **live preview** of the new font size will appear as you hover the mouse over different options. In our example, we will choose **16** to make the text **larger**.



4. The text will change to the **selected font size**.

	A	B
1	Webinar Training Log	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

You can also use the **Increase Font Size** and **Decrease Font Size** commands or enter a **custom font size** using your keyboard.

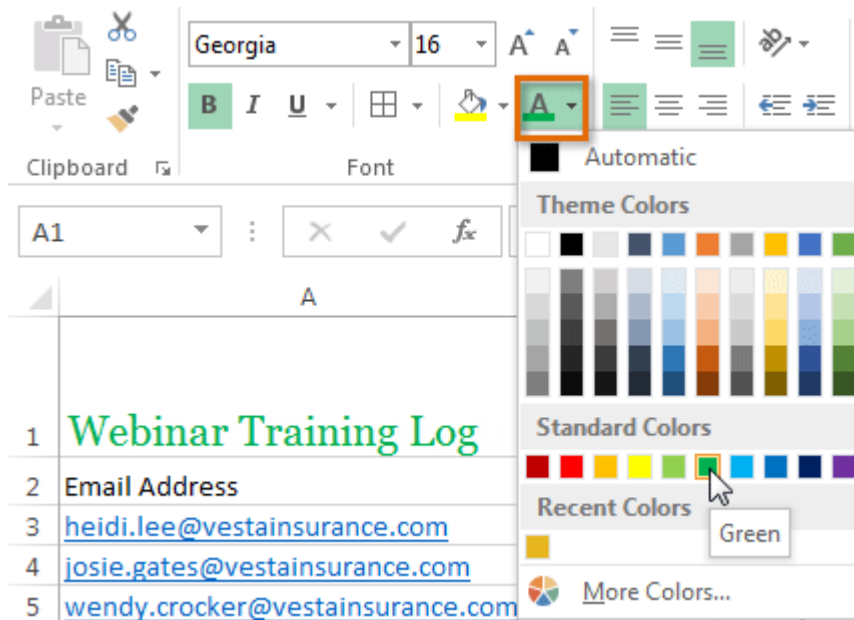


To change the font color:

1. Select the **cell(s)** you want to modify.

	A	B
1	Webinar Training Log	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

- Click the **drop-down arrow** next to the **Font Color** command on the **Home** tab. The **Color** menu will appear.
- Select the desired **font color**. A **live preview** of the new font color will appear as you hover the mouse over different options. In our example, we'll choose **Green**.

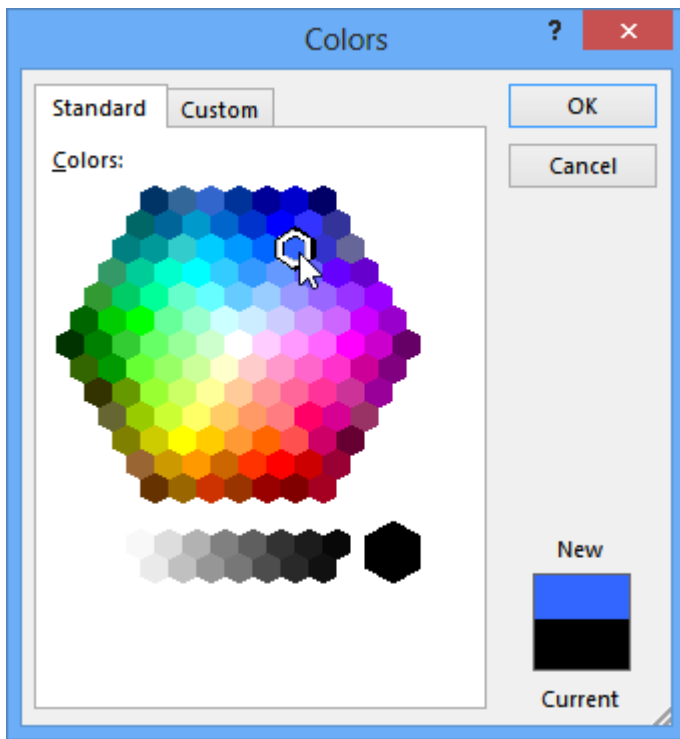


- The text will change to the **selected font color**.

	A	B
1	Webinar Training Log	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

Select **More Colors** at the bottom of the menu to access additional color options.



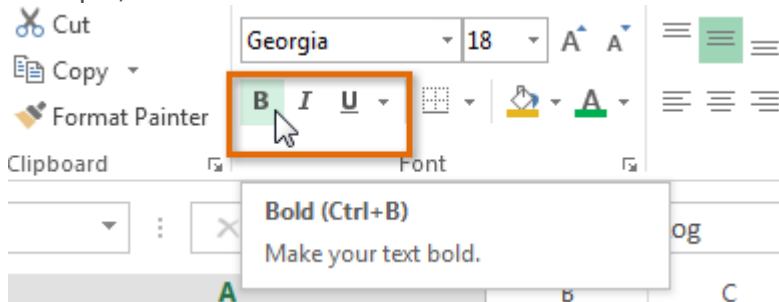


To use the Bold, Italic, and Underline commands:

1. Select the **cell(s)** you want to modify.

	A	B
1	Webinar Training Log	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

2. Click the Bold (**B**), Italic (*I*), or Underline (U) command on the **Home** tab. In our example, we'll make the selected cells **bold**.



3. The **selected style** will be applied to the text.

	A	B
1	<b>Webinar Training Log</b>	
2	Email Address	Last Name
3	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
4	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

You can also press **Ctrl+B** on your keyboard to make selected text **bold**, **Ctrl+I** to apply **italics**, and **Ctrl+U** to apply an **underline**.

## Text alignment

By default, any text entered into your worksheet will be aligned to the bottom-left of a cell, while any numbers will be aligned to the bottom-right. Changing the **alignment** of your cell content allows you to choose how the content is displayed in any cell, which can make your cell content easier to read.

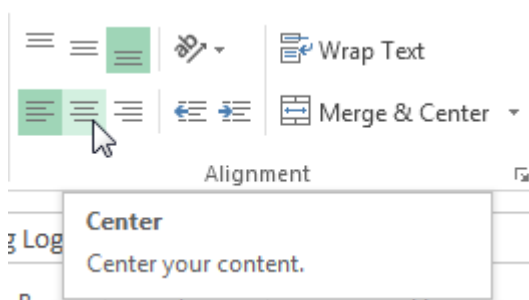
### To change horizontal text alignment:

In our example below, we'll modify the alignment of our **title** cell to create a more polished look and further distinguish it from the rest of the worksheet.

1. Select the **cell(s)** you want to modify.

3	<b>Webinar Training Log</b>	
4	Email Address	Last Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

2. Select one of the three **horizontal alignment** commands on the **Home** tab. In our example, we'll choose **Center Align**.



3. The text will **realign**.

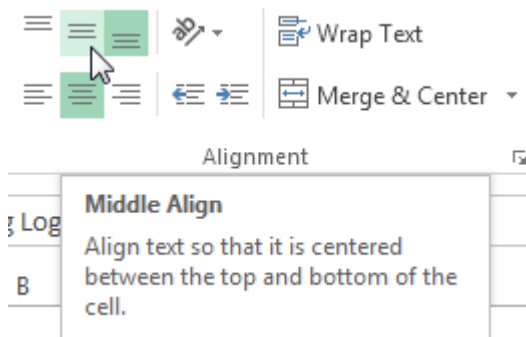
3	<b>Webinar Training Log</b>	
4	Email Address	Last Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

To change vertical text alignment:

1. Select the **cell(s)** you want to modify.

3	<b>Webinar Training Log</b> 	
4	Email Address	Last Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

2. Select one of the three **vertical alignment** commands on the **Home** tab. In our example, we'll choose **Middle Align**.



3. The text will **realign**.

3	<b>Webinar Training Log</b>	
4	Email Address	Last Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates

You can apply **both** vertical and horizontal alignment settings to any cell.

## Cell borders and fill colors

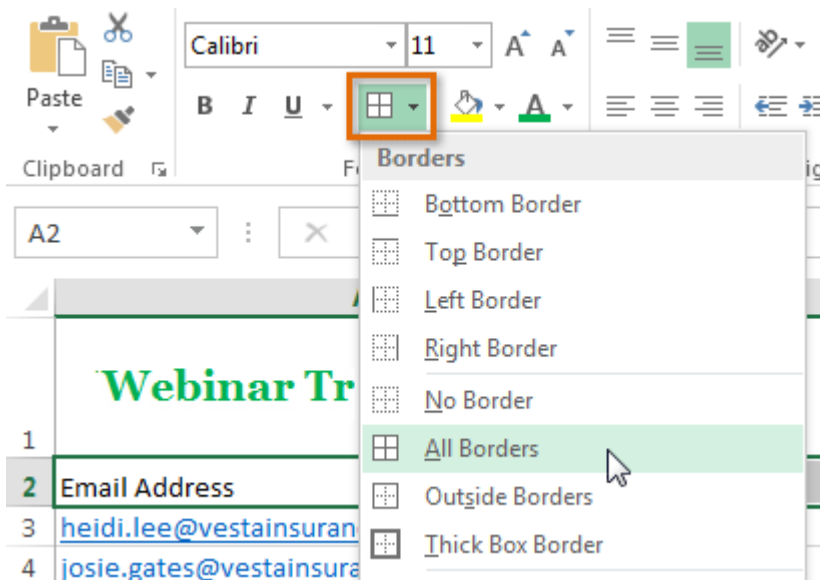
**Cell borders** and **fill colors** allow you to create clear and defined boundaries for different sections of your worksheet. Below, we'll add cell borders and fill color to our **header cells** to help distinguish them from the rest of the worksheet.

## To add a border:

1. Select the **cell(s)** you want to modify.

	<b>Webinar Training Log</b>		
3			
4	Email Address	Last Name	First Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:iosie.gates@vestainsurance.com">iosie.gates@vestainsurance.com</a>	Gates	Josie

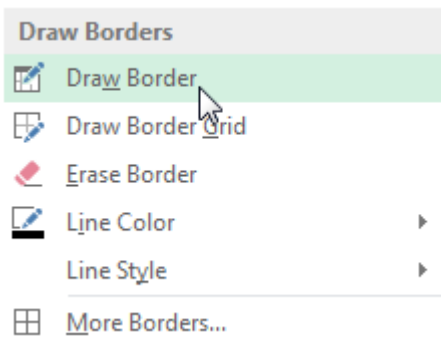
2. Click the **drop-down arrow** next to the **Borders** command on the **Hometab**. The **Borders** drop-down menu will appear.
3. Select the **border style** you want to use. In our example, we will choose to display **All Borders**.



4. The **selected border style** will appear.

	<b>Webinar Training Log</b>		
3			
4	Email Address	Last Name	First Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:iosie.gates@vestainsurance.com">iosie.gates@vestainsurance.com</a>	Gates	Josie

You can draw borders and change the **line style** and **color** of borders with the **Draw Borders** tools at the bottom of the Borders drop-down menu.

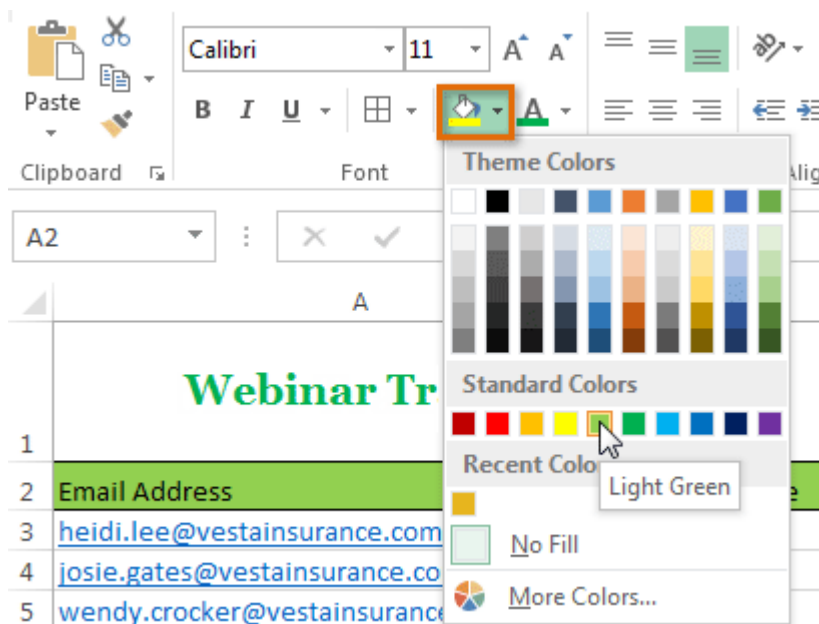


## To add a fill color:

1. Select the **cell(s)** you want to modify.

Webinar Training Log			
4	Email Address	Last Name	First Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie

2. Click the **drop-down arrow** next to the **Fill Color** command on the **Home** tab. The **Fill Color** menu will appear.
3. Select the **fill color** you want to use. A **live preview** of the new fill color will appear as you hover the mouse over different options. In our example, we'll choose **Light Green**.

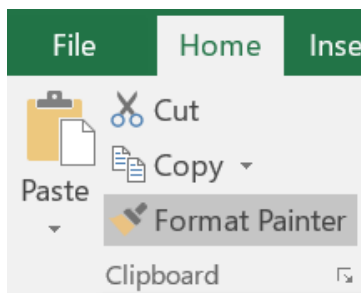


4. The **selected fill color** will appear in the selected cells.

3	<b>Webinar Training Log</b>		
4	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie

## Format Painter

If you want to copy formatting from one cell to another, you can use the **Format Painter** command on the **Home** tab. When you click the Format Painter, it will copy all of the formatting from the selected cell. You can then **click and drag** over any cells you want to paste the formatting to.



Watch the video below to learn two different ways to use the Format Painter.

## Cell styles

Instead of formatting cells manually, you can use Excel's **predesigned cell styles**. Cell styles are a quick way to include professional formatting for different parts of your workbook, such as **titles** and **headers**.

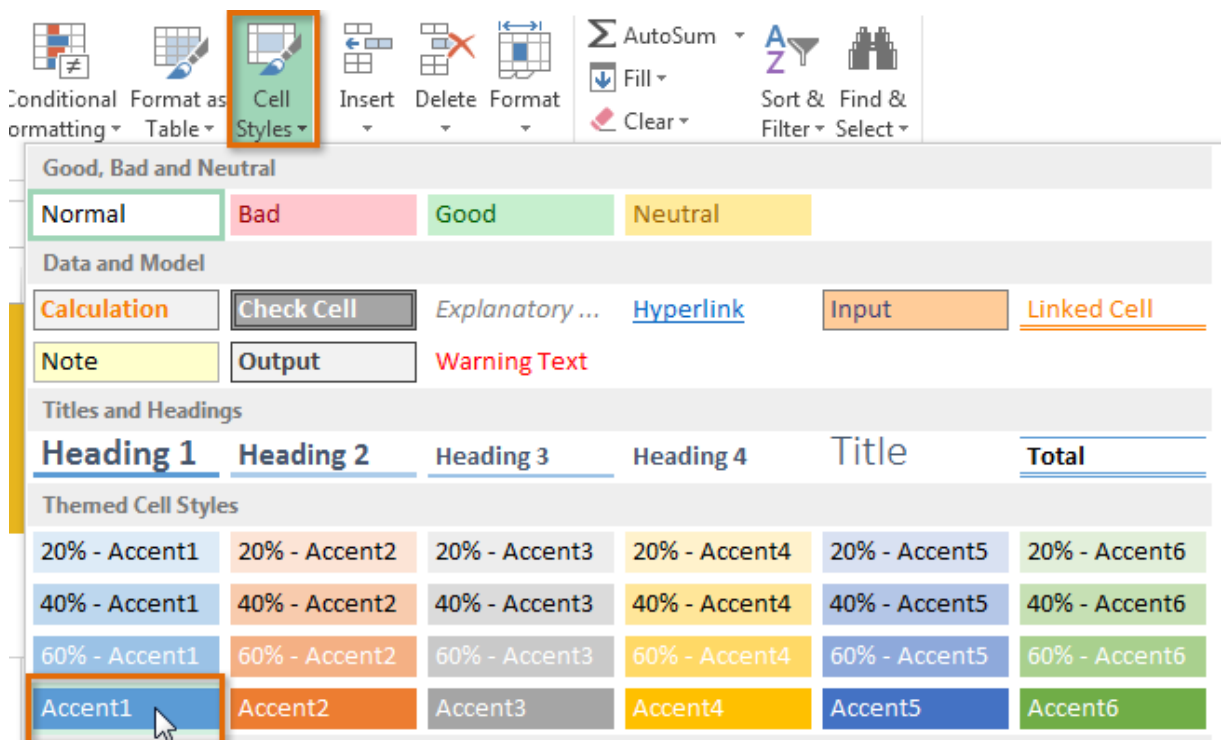
### To apply a cell style:

In our example, we'll apply a new cell style to our existing **title** and **header cells**.

1. Select the **cell(s)** you want to modify.

3	<b>Webinar Training Log</b>		
4	<b>Email Address</b>	<b>Last Name</b>	<b>First Name</b>
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie

2. Click the **Cell Styles** command on the **Home** tab, then choose the **desired style** from the drop-down menu. In our example, we'll choose **Accent 1**.



3. The **selected cell style** will appear.

	Webinar Training Log		
3			
4	Email Address	Last Name	First Name
5	<a href="mailto:heidi.lee@vestainsurance.com">heidi.lee@vestainsurance.com</a>	Lee	Heidi
6	<a href="mailto:josie.gates@vestainsurance.com">josie.gates@vestainsurance.com</a>	Gates	Josie

Applying a cell style will **replace** any existing cell formatting except for text alignment. You may not want to use cell styles if you've already added a lot of formatting to your workbook.

## Formatting text and numbers

One of the most powerful tools in Excel is the ability to apply **specific formatting** for text and numbers. Instead of displaying all cell content in exactly the same way, you can use formatting to change the appearance of **dates, times, decimals, percentages (%), currency (\$)**, and much more.

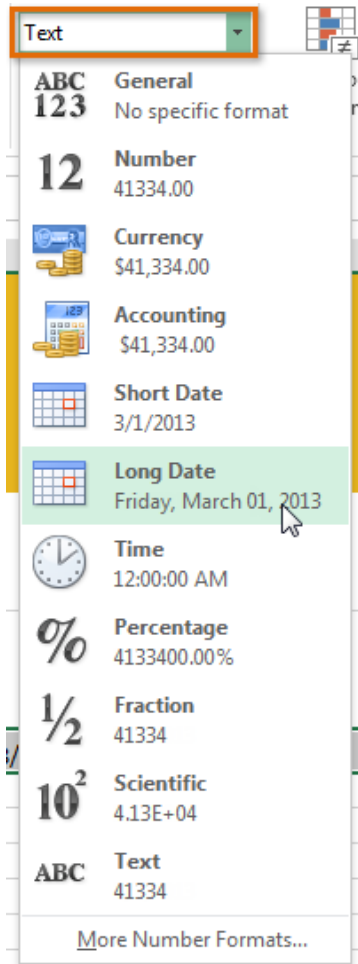
### To apply number formatting:

In our example, we'll change the **number format** for several cells to modify the way **dates** are displayed.

1. Select the **cells(s)** you want to modify.

3/1/2013	3/8/2013	3/15/2013	3/22/2013	3/29/2013
x	x			

- Click the **drop-down arrow** next to the **Number Format** command on the **Home** tab. The **Number Formatting** drop-down menu will appear.
- Select the **desired formatting option**. In our example, we will change the formatting to **Long Date**.

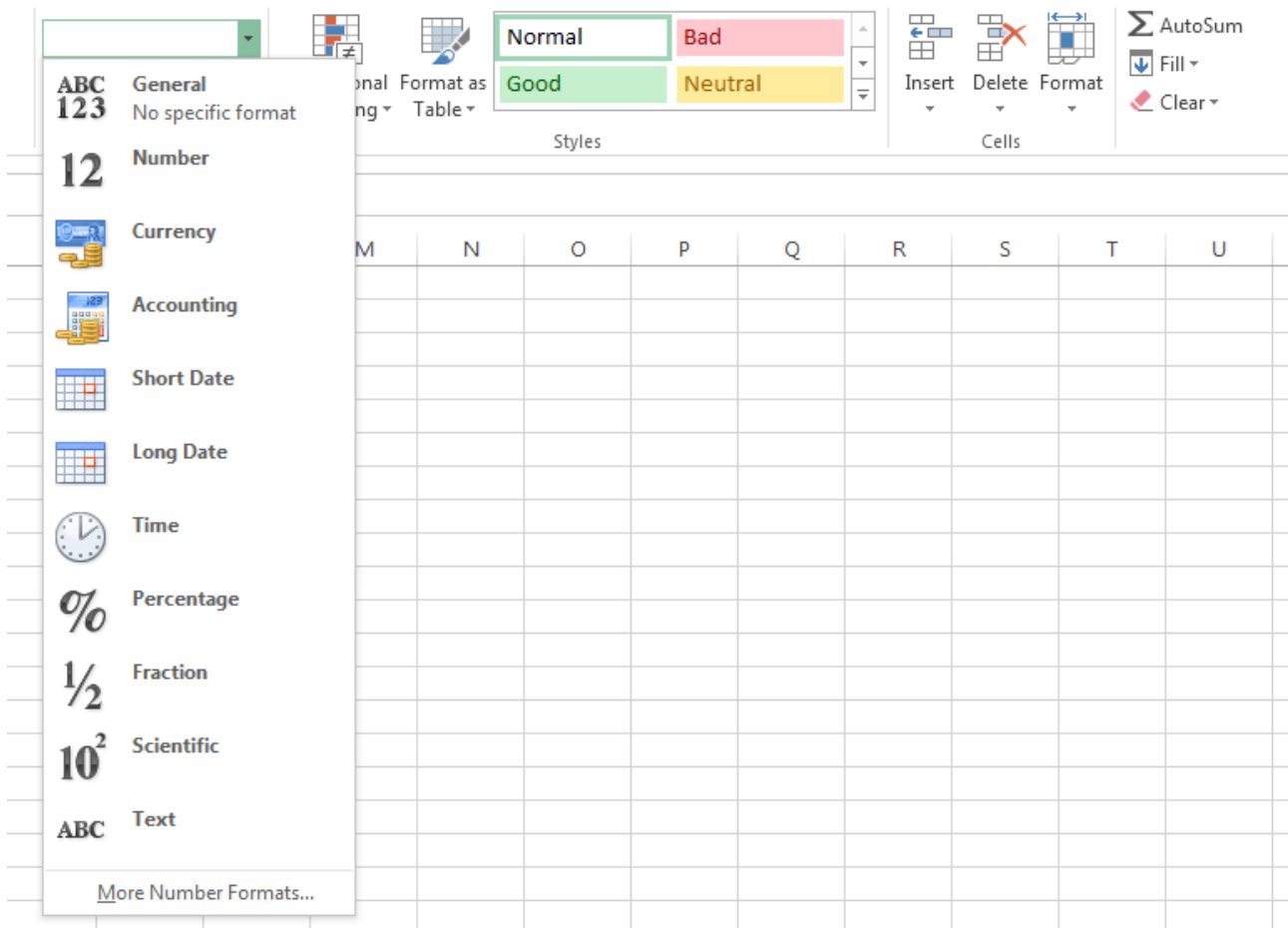


- The selected cells will change to the **new formatting** style. For some number formats, you can then use the **Increase Decimal** and **Decrease Decimal** commands (below the Number Format command) to change the number of decimal places that are displayed.

Friday, March 01, 2013	Friday, March 08, 2013	Friday, March 15, 2013	Friday, March 22, 2013	Friday, March 29, 2013
x	x			

Click the buttons in the interactive below to learn about different text and number formatting options.





## Challenge!

1. Open the practice document Excel2013\_FormatCells\_Practice.xlsx.
2. Select a **cell** and change the **font style, size, and color** of the text. Change the title in cell A3 to Verdana font style, size 16, with a font color of green.
3. Apply **bold, italics, or underline** to a cell. Bold the text in **cell range A4:C4**.
4. Try changing the **vertical and horizontal text alignment** for some cells.
5. Add a **border** to a cell range. Add a border to the header cells in in row 4.
6. Change the **fill color** of a cell range. Add a fill color to row 4.
7. Try changing the **formatting** of a number. Change the date formatting in **cell range D4:H4 to Long Date**.

## Conditional Formatting

Let's say you have a worksheet with thousands of rows of data. It would be extremely difficult to see patterns and trends just from examining the raw information. Similar to charts **conditional formatting** provides another way to visualize data and make worksheets easier to understand.

# Understanding conditional formatting

Conditional formatting allows you to automatically apply formatting—such as **colors**, **icons**, and **data bars**—to one or more cells based on the **cell value**. To do this, you'll need to create a **conditional formatting rule**. For example, a conditional formatting rule might be: **If the value is less than \$2000, color the cell red**. By applying this rule, you'd be able to quickly see which cells contain values less than \$2000.

	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

## To create a conditional formatting rule:

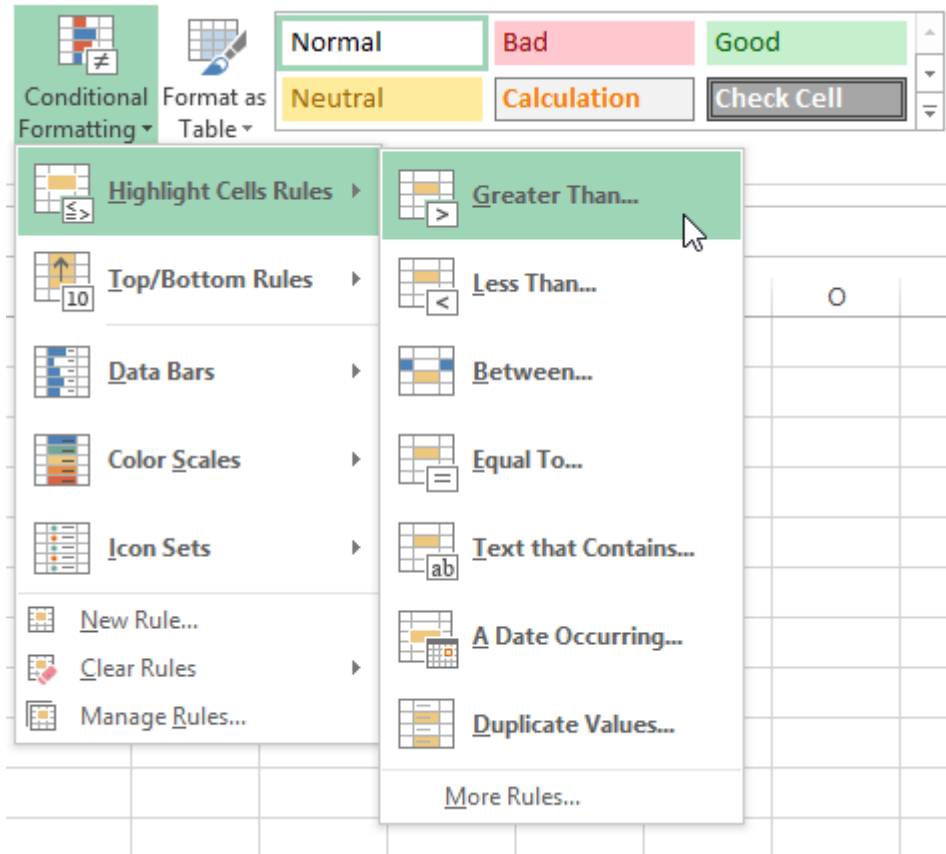
In our example, we have a worksheet containing sales data, and we'd like to see which salespeople are meeting their monthly sales goals. The sales goal is \$4000 per month, so we'll create a conditional formatting rule for any cells containing a value higher than 4000.

1. Select the **desired cells** for the conditional formatting rule.

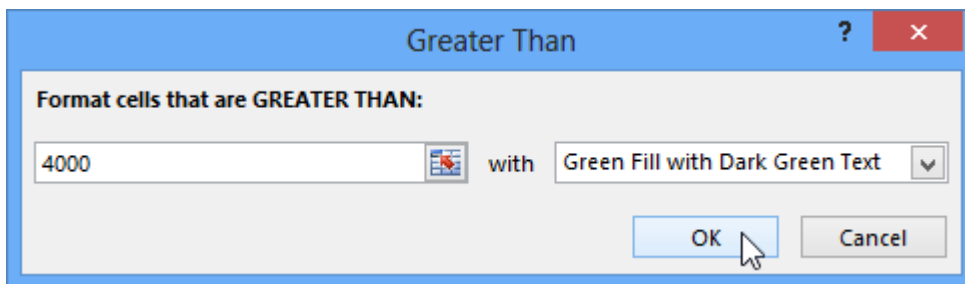
	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

2. From the **Home** tab, click the **Conditional Formatting** command. A drop-down menu will appear.

3. Hover the mouse over the desired **conditional formatting type**, then select the **desired rule** from the menu that appears. In our example, we want to **highlight cells** that are **greater than \$4000**.



4. A dialog box will appear. Enter the **desired value(s)** into the blank field. In our example, we'll enter 4000 as our value.
5. Select a **formatting style** from the drop-down menu. In our example, we'll choose **Green Fill with Dark Green Text**, then click **OK**.



6. The conditional formatting will be applied to the selected cells. In our example, it's easy to see which salespeople reached the \$4000 sales goal for each month.

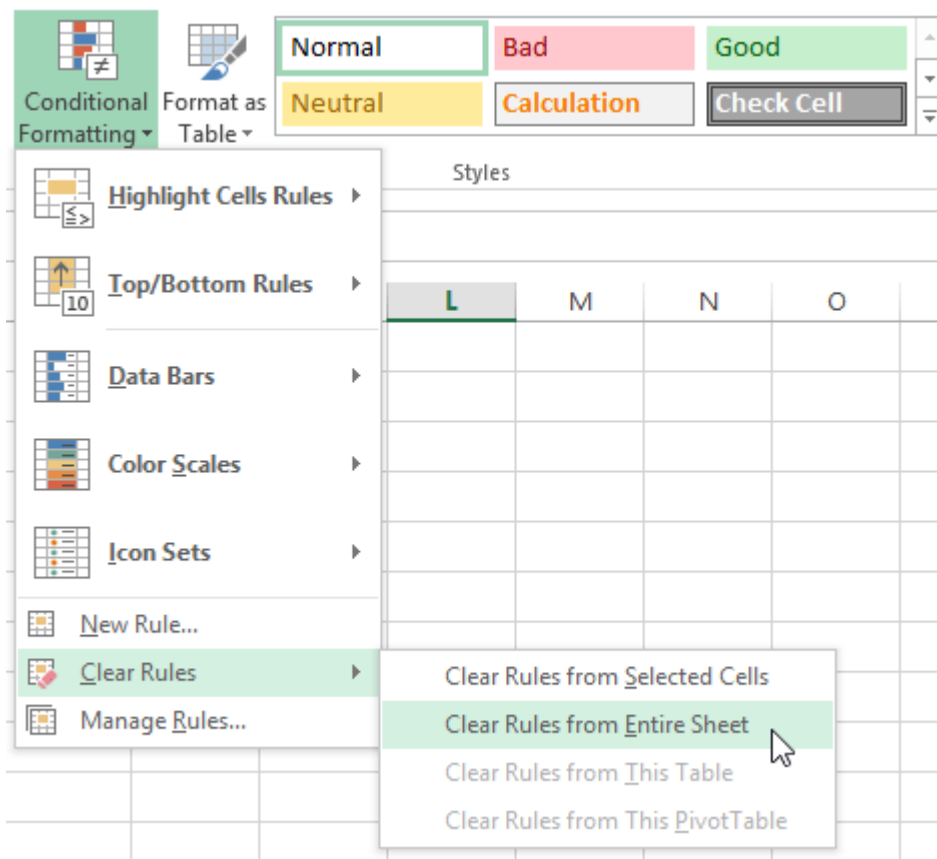
	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

You can apply multiple conditional formatting rules to a cell range or worksheet, allowing you to visualize different trends and patterns in your data.

	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

## To remove conditional formatting:

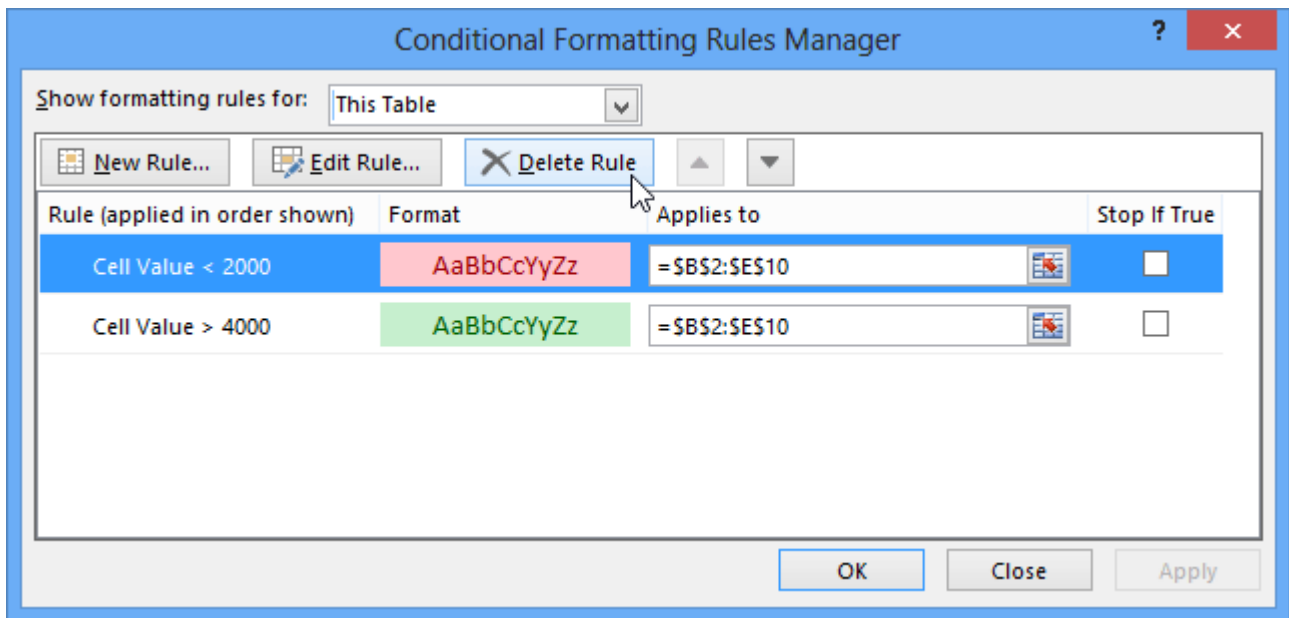
1. Click the **Conditional Formatting** command. A drop-down menu will appear.
2. Hover the mouse over **Clear Rules**, and choose which rules you want to clear. In our example, we'll select **Clear Rules from Entire Sheet** to remove all conditional formatting from the worksheet.



3. The conditional formatting will be removed.

	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

Click **Manage Rules** to edit or delete **individual** rules. This is especially useful if you have applied **multiple** rules to a worksheet.



## Conditional formatting presets

Excel has several predefined styles—or **presets**—you can use to quickly apply conditional formatting to your data. They are grouped into three categories:

- **Data Bars** are horizontal bars added to each cell, much like a **bar graph**.

\$3,863.00	\$1,117.00	\$8,237.00	\$8,690.00
\$9,355.00	\$1,100.00	\$10,185.00	\$18,749.00
\$6,702.00	\$2,116.00	\$13,452.00	\$8,046.00
\$4,415.00	\$1,089.00	\$4,404.00	\$20,114.00

- **Color Scales** change the color of each cell based on its value. Each color scale uses a **two- or three-color gradient**. For example, in the **Green - Yellow - Red** color scale, the **highest** values are green, the **average** values are yellow, and the **lowest** values are red.

\$3,863.00	\$1,117.00	\$8,237.00	\$8,690.00
\$9,355.00	\$1,100.00	\$10,185.00	\$18,749.00
\$6,702.00	\$2,116.00	\$13,452.00	\$8,046.00
\$4,415.00	\$1,089.00	\$4,404.00	\$20,114.00

- **Icon Sets** add a specific icon to each cell based on its value.

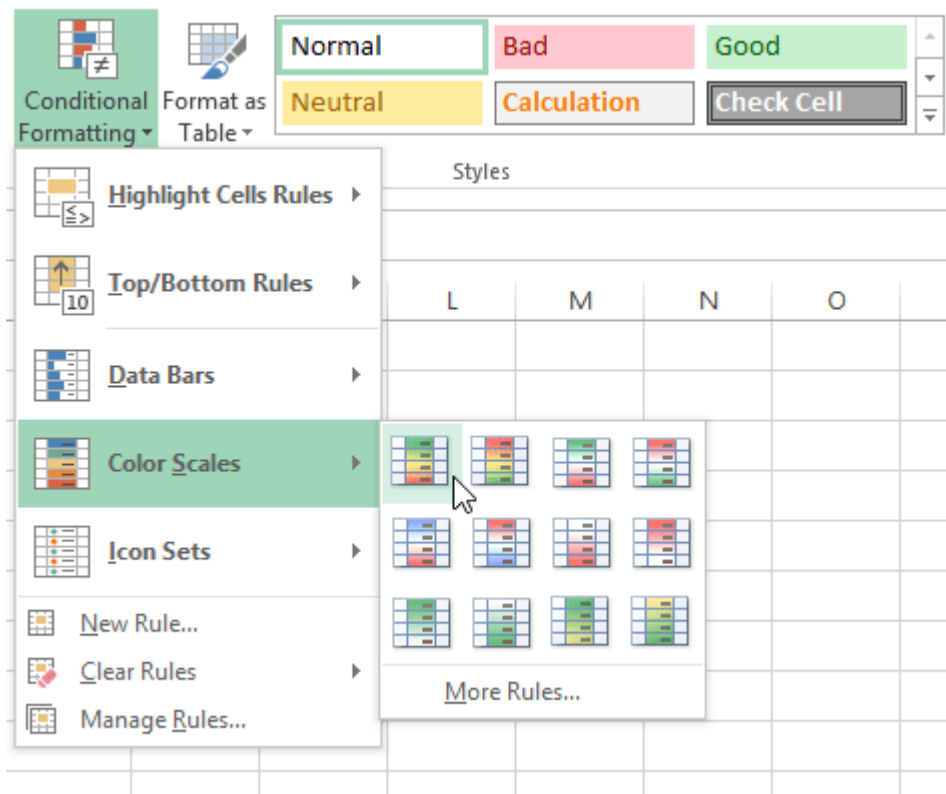
↓ \$3,863.00	↓ \$1,117.00	↘ \$8,237.00	↘ \$8,690.00
↘ \$9,355.00	↓ \$1,100.00	↘ \$10,185.00	↑ \$18,749.00
↘ \$6,702.00	↓ \$2,116.00	↘ \$13,452.00	↘ \$8,046.00
↓ \$4,415.00	↓ \$1,089.00	↓ \$4,404.00	↑ \$20,114.00

To use preset conditional formatting:

1. Select the **desired cells** for the conditional formatting rule.

	A	B	C	D	E
1	Salesperson	May	June	July	Aug.
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

2. Click the **Conditional Formatting** command. A drop-down menu will appear.
3. Hover the mouse over the **desired preset**, then choose a **preset style** from the menu that appears.



4. The conditional formatting will be applied to the selected cells.

	A	B	C	D	E
1	<b>Salesperson</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>
2	Albertson, Kathy	\$3,947.00	\$557.00	\$3,863.00	\$1,117.00
3	Allenson, Carol	\$4,411.00	\$1,042.00	\$9,355.00	\$1,100.00
4	Altman, Zoey	\$2,521.00	\$3,072.00	\$6,702.00	\$2,116.00
5	Bittiman, William	\$4,752.00	\$3,755.00	\$4,415.00	\$1,089.00
6	Brennan, Michael	\$4,964.00	\$3,152.00	\$11,601.00	\$1,122.00
7	Carlson, David	\$2,327.00	\$4,056.00	\$3,726.00	\$1,135.00
8	Collman, Harry	\$3,967.00	\$4,906.00	\$9,007.00	\$2,113.00
9	Counts, Elizabeth	\$4,670.00	\$521.00	\$4,505.00	\$1,024.00
10	David, Chloe	\$3,379.00	\$3,428.00	\$3,973.00	\$1,716.00

## Challenge!

1. Open the practice document Excel2013\_Conditional\_Practice.xlsx.
2. Apply conditional formatting to a range of cells with **numerical values**. Apply a rule for the sales data (cells B3:G23) that will fill cells with green if their values are more than \$9000.
3. Apply a second conditional formatting rule to the same set of cells. Apply a **preset** conditional formatting rule.
4. Clear all conditional formatting rules from the worksheet.

## Charts

It can often be difficult to interpret Excel workbooks that contain a lot of data. **Charts** allow you to illustrate your workbook data **graphically**, which makes it easy to visualize **comparisons** and **trends**.

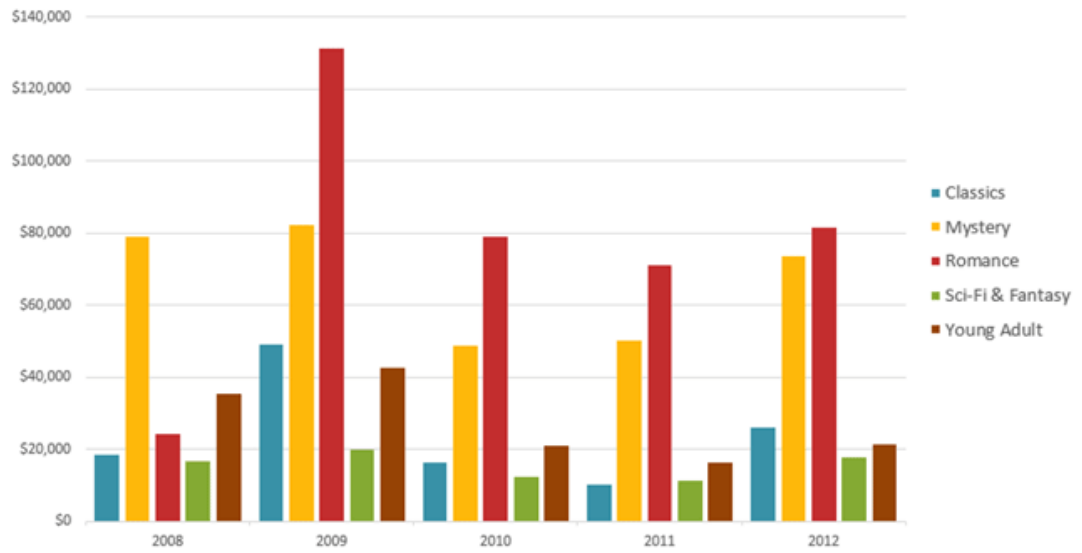
Practice document: Excel2013\_Charts\_Practice.xlsx.

## Understanding charts

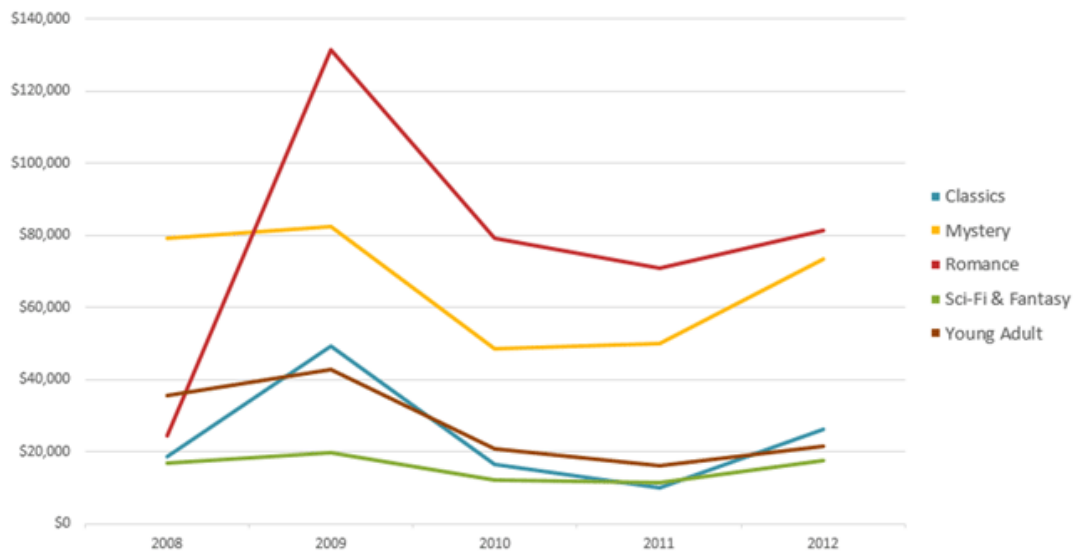
Excel has several different **types of charts**, allowing you to choose the one that best fits your data. In order to use charts effectively, you'll need to understand how different charts are used.



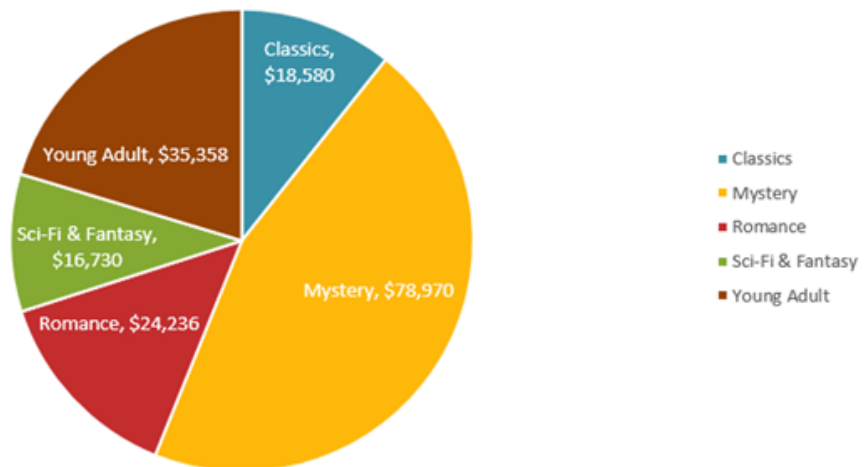
# Column



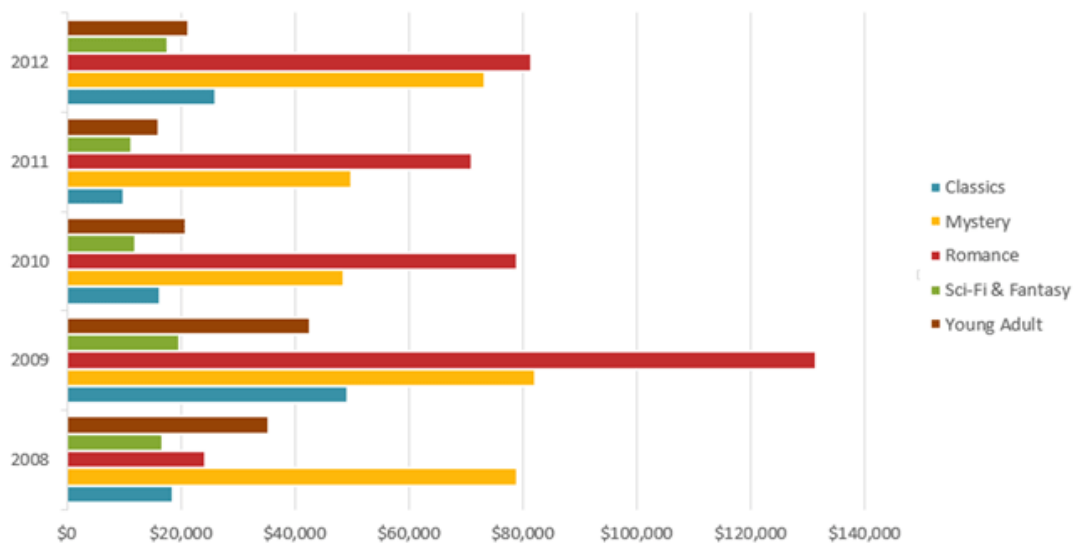
# Line



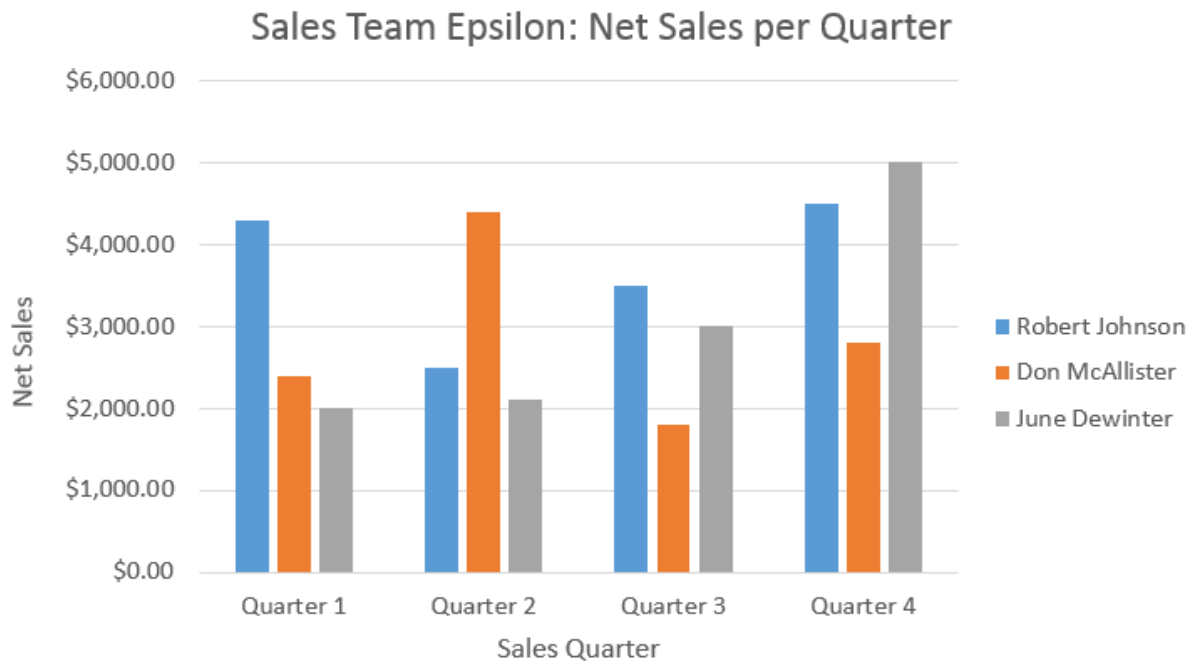
# Pie



# Bar



In addition to chart types, you'll need to understand how to **read a chart**. Charts contain several different elements, or parts that can help you interpret the data.

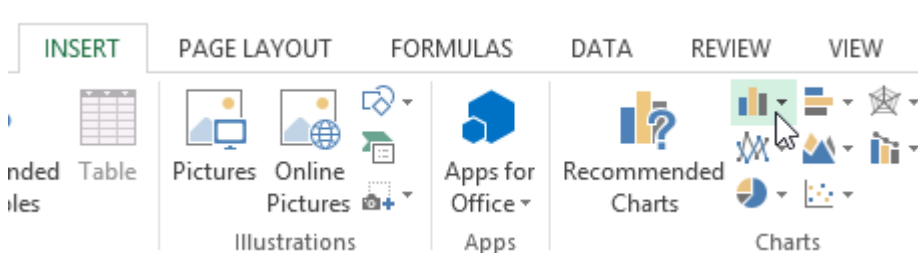


## To insert a chart:

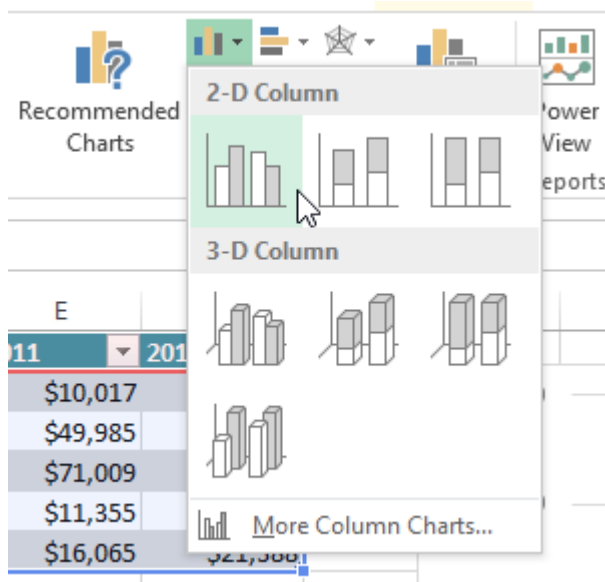
1. Select the **cells** you want to chart, including the **column titles** and **row labels**. These cells will be the **source data** for the chart. In our example, we'll select cells A1:F6.

	A	B	C	D	E	F	G
1	Genre	2008	2009	2010	2011	2012	
2	Classics	\$18,580	\$49,225	\$16,326	\$10,017	\$26,134	
3	Mystery	\$78,970	\$82,262	\$48,640	\$49,985	\$73,428	
4	Romance	\$24,236	\$131,390	\$79,022	\$71,009	\$81,474	
5	Sci-Fi & Fantasy	\$16,730	\$19,730	\$12,109	\$11,355	\$17,686	
6	Young Adult	\$35,358	\$42,685	\$20,893	\$16,065	\$21,388	
7							
8							

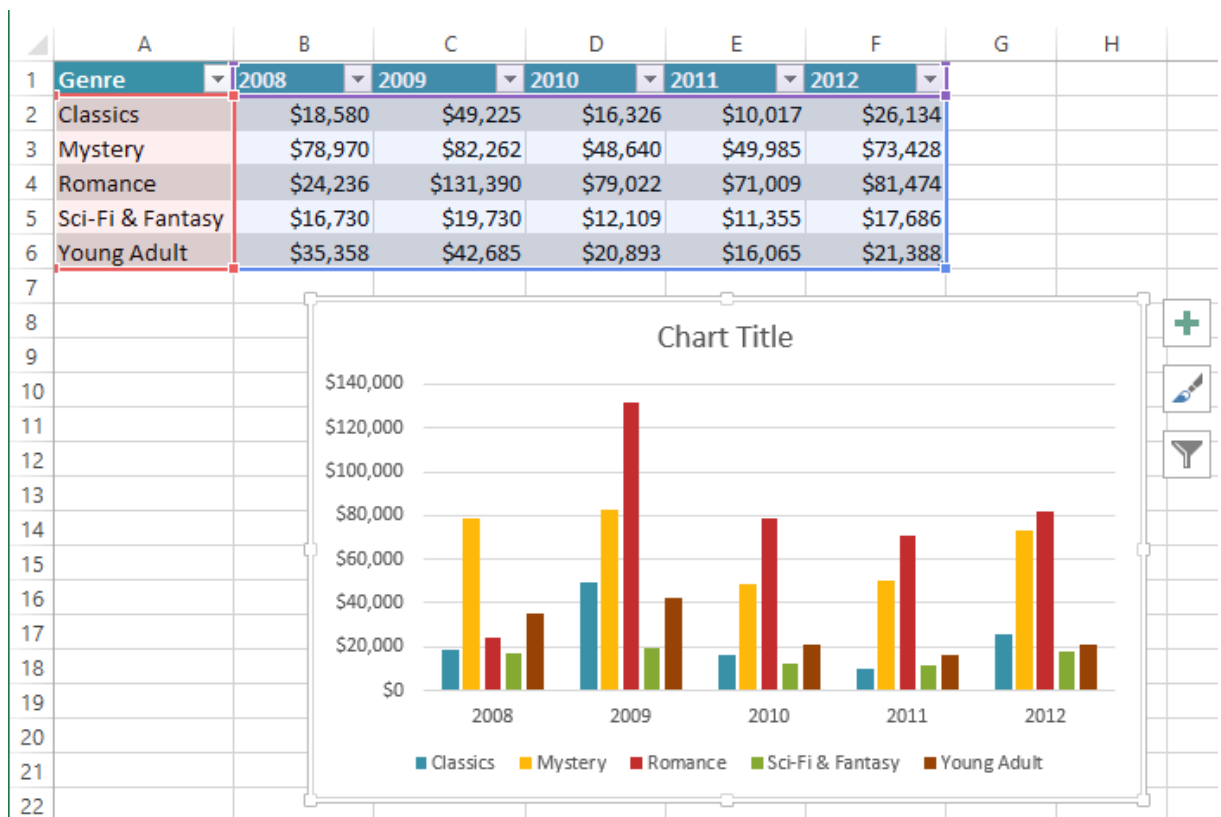
2. From the **Insert** tab, click the desired **Chart** command. In our example, we'll select **Column**.



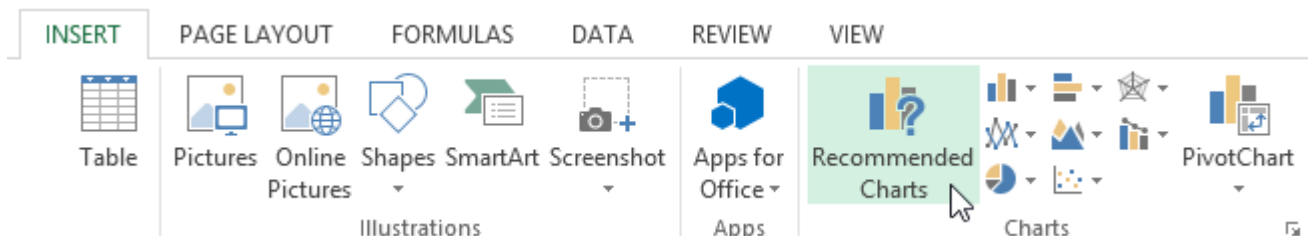
3. Choose the desired **chart type** from the drop-down menu.



4. The selected chart will be inserted in the worksheet.



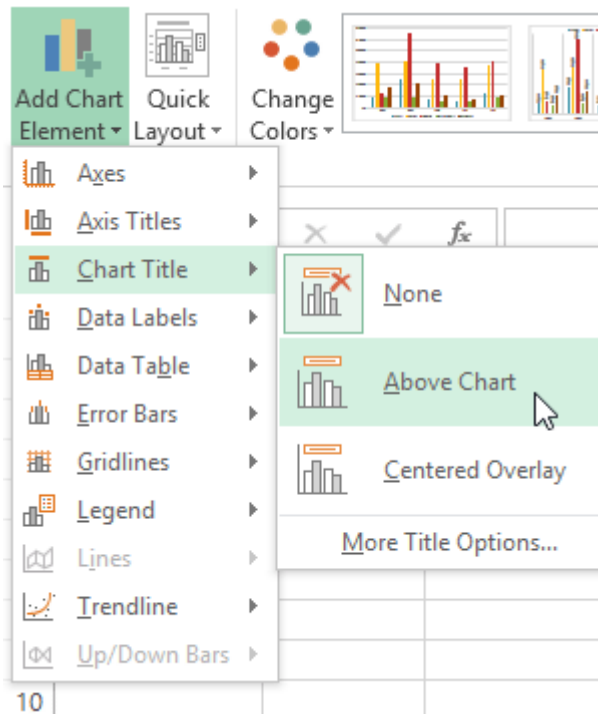
If you're not sure which type of chart to use, the **Recommended Charts** command will suggest several different charts based on the source data.



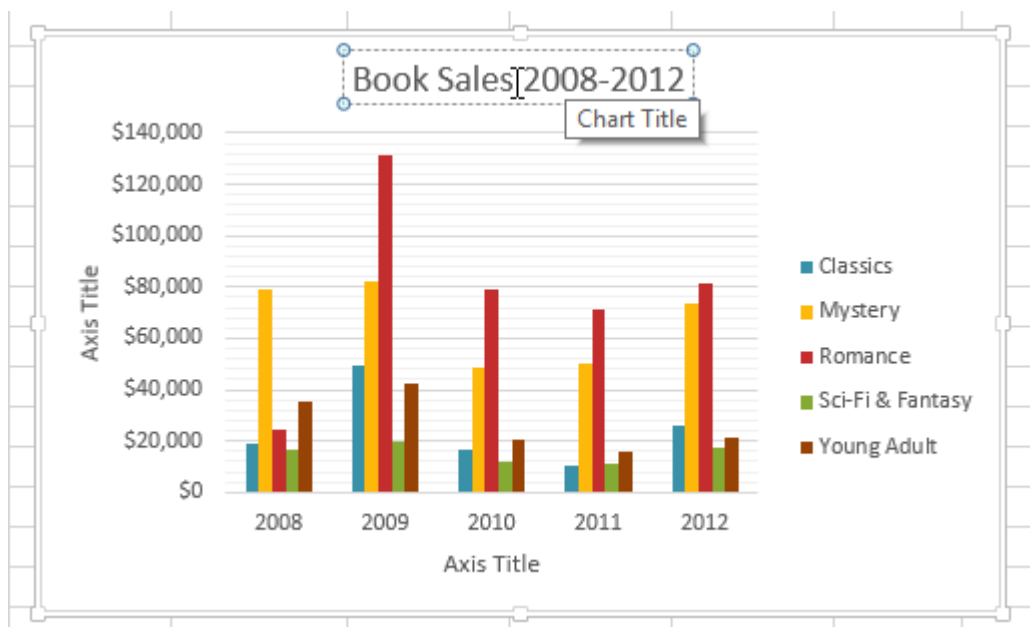
# Chart layout and style

After inserting a chart, there are several things you may want to change about the way your data is displayed. It's easy to edit a chart's **layout** and **style** from the **Design** tab.

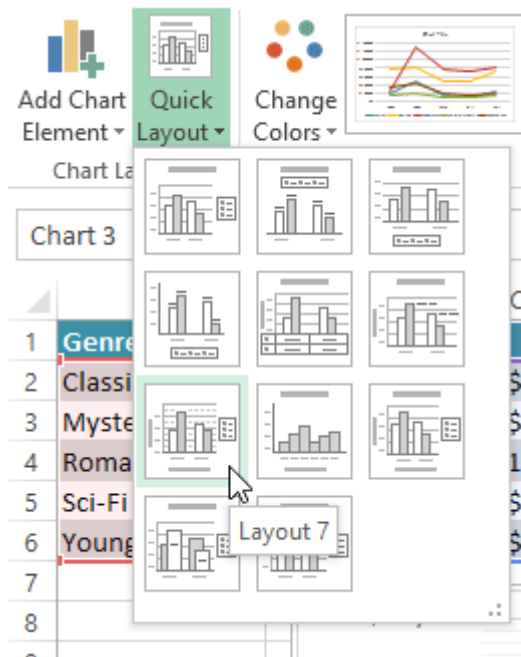
- Excel allows you to add **chart elements**—such as **chart titles**, **legends**, and **data labels**—to make your chart easier to read. To add a chart element, click the **Add Chart Element** command on the **Design** tab, then choose the **desired element** from the drop-down menu.



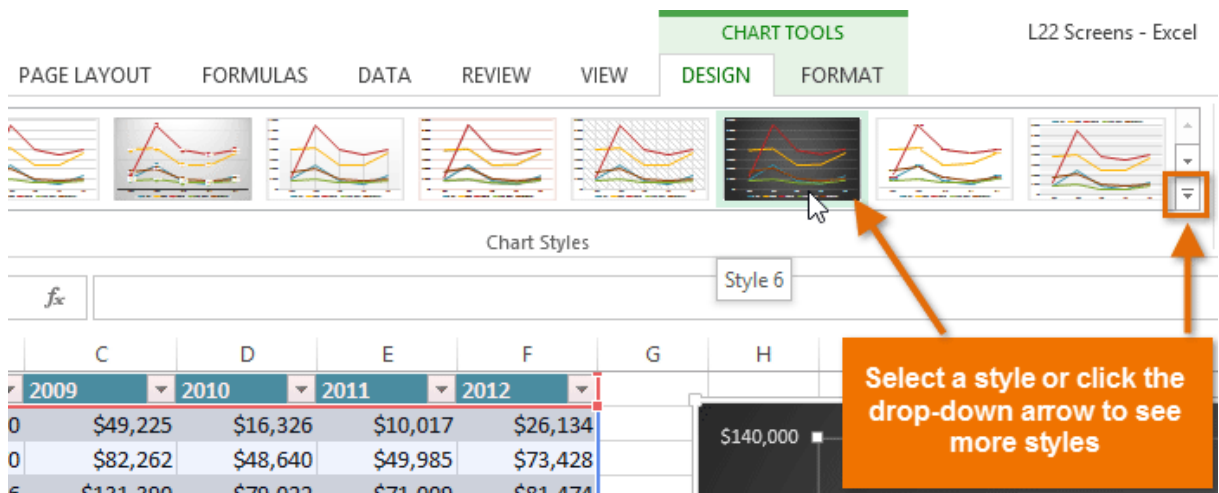
- To **edit** a chart element, like a **chart title**, simply double-click the **placeholder** and begin typing.



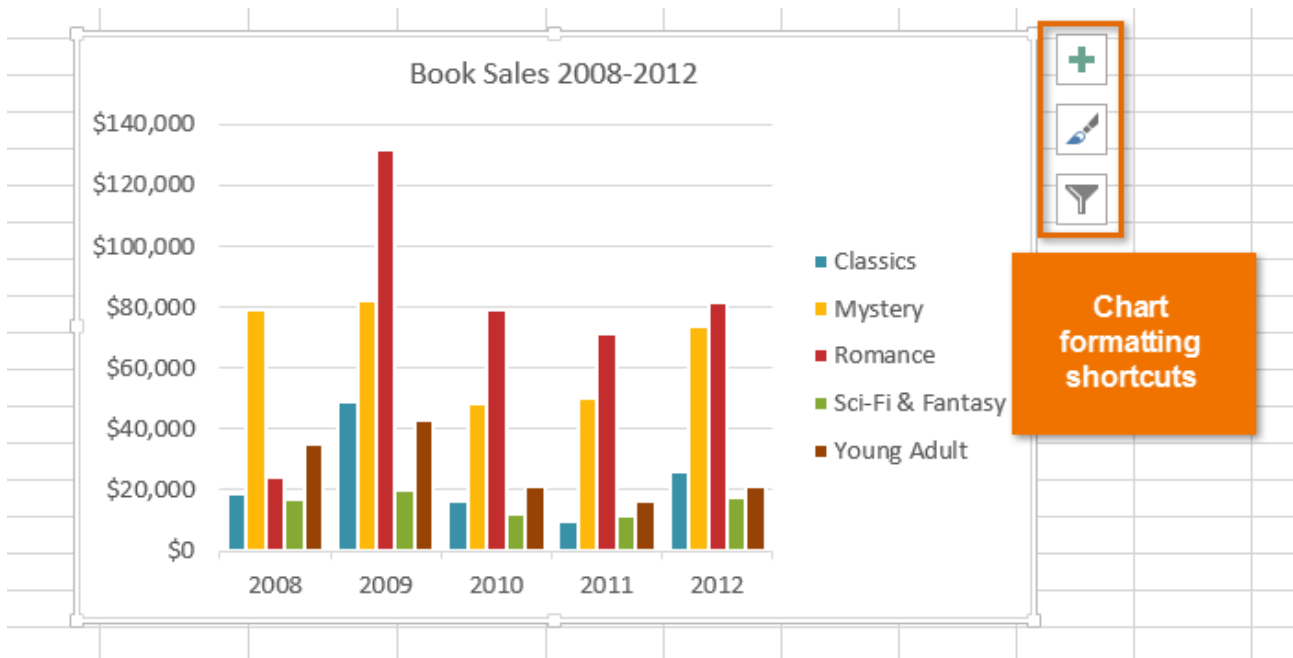
- If you don't want to add chart elements individually, you can use one of Excel's predefined layouts. Simply click the **Quick Layout** command, then choose the **desired layout** from the drop-down menu.



- Excel also includes several different **chart styles**, which allow you to quickly modify the look and feel of your chart. To change the chart style, select the **desired style** from the **Chart styles** group.



You can also use the chart formatting shortcut buttons to quickly **add chart elements**, change the **chart style**, and **filter** the chart data.

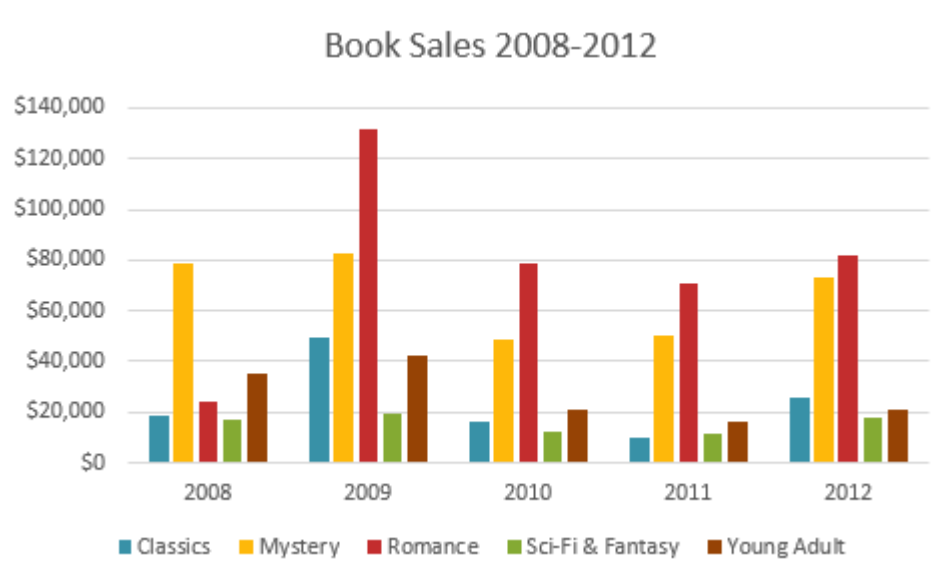


## Other chart options

There are many other ways to customize and organize your charts. For example, Excel allows you to **rearrange** a chart's data, change the **chart type**, and even **move** the chart to a different location in the workbook.

### To switch row and column data:

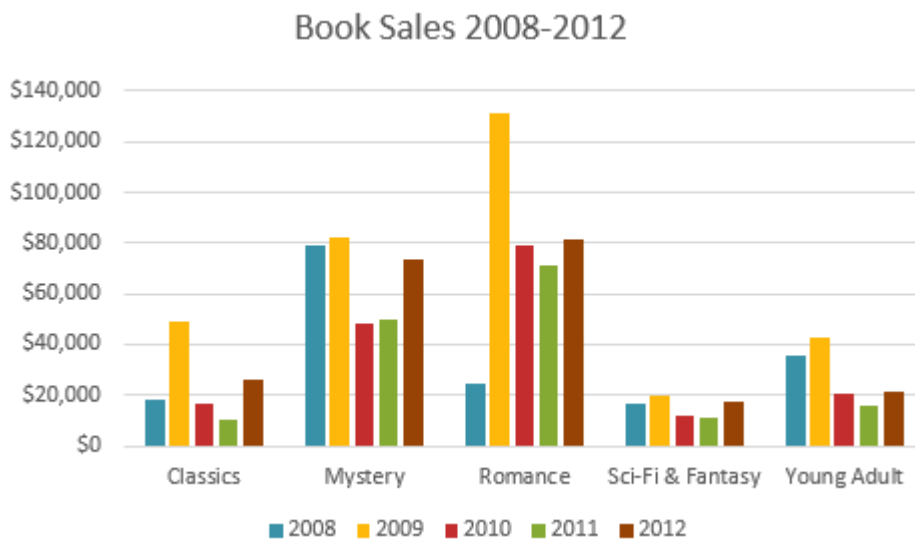
Sometimes you may want to change the way charts **group** your data. For example, in the chart below, the Book Sales data are grouped **by year**, with columns for **each genre**. However, we could switch the rows and columns so the chart will group the data **by genre**, with columns for **each year**. In both cases, the chart contains the same data—it's just organized differently.



1. Select the **chart** you want to modify.
2. From the **Design** tab, select the **Switch Row/Column** command.



3. The rows and columns will be **switched**. In our example, the data is now grouped by genre, with columns for each year.



## To change the chart type:

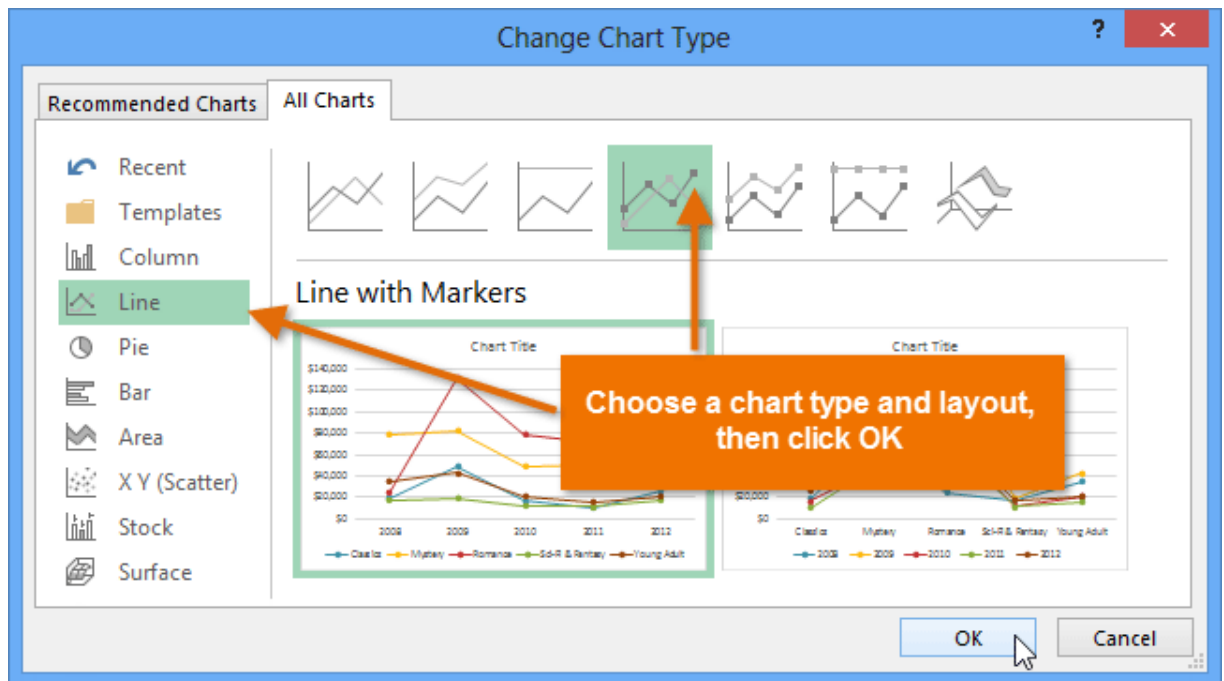
If you find that your data isn't well suited to a certain chart, it's easy to switch to a new **chart type**. In our example, we'll change our chart from a **Column** chart to a **Line** chart.

1. From the **Design** tab, click the **Change Chart Type** command.

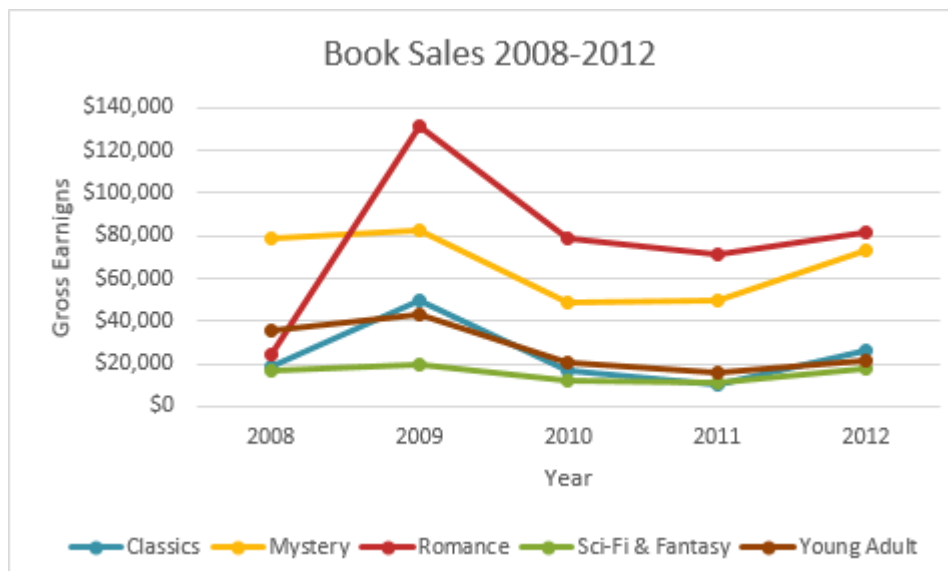


2. The **Change Chart Type** dialog box will appear. Select a new chart **type** and **layout**, then click **OK**. In our example, we'll choose a **Line** chart.





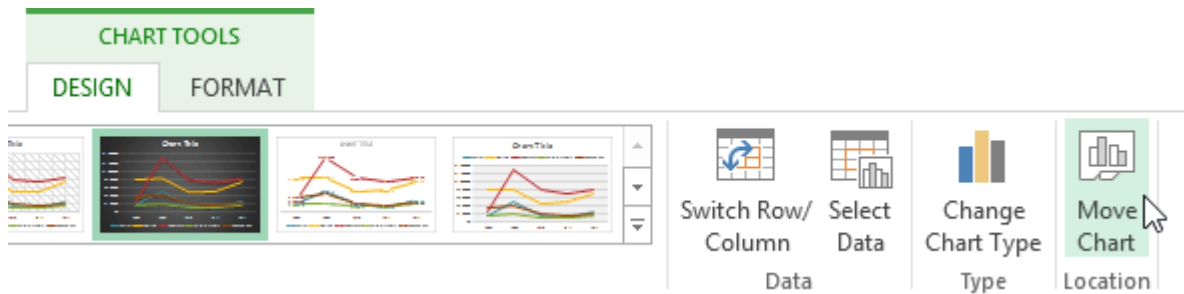
3. The selected chart type will appear. In our example, the line chart makes it easier to see trends in the sales data over time.



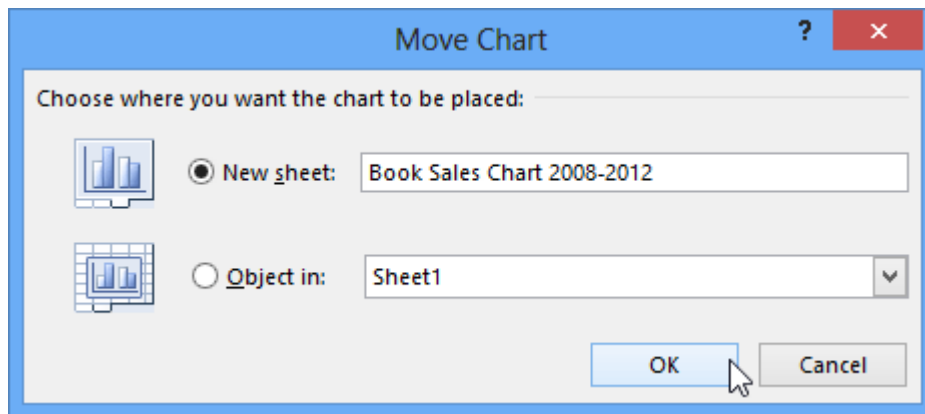
## To move a chart:

Whenever you insert a new chart, it will appear as an object on the same worksheet that contains its source data. Alternatively, you can **move** the chart to a **new worksheet** to help keep your data organized.

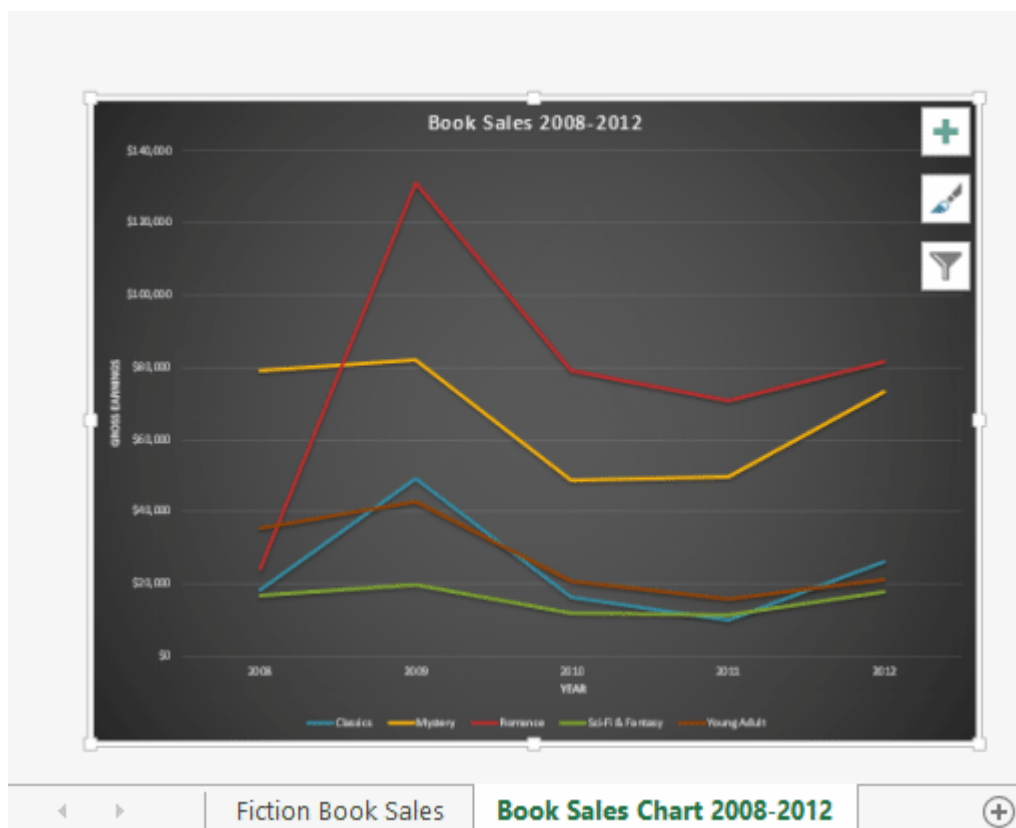
1. Select the **chart** you want to move.
2. Click the **Design** tab, then select the **Move Chart** command.



3. The **Move Chart** dialog box will appear. Select the **desired location** for the chart. In our example, we'll choose to move it to a **New sheet**, which will create a new worksheet.
4. Click **OK**.



5. The chart will appear in the selected location. In our example, the chart now appears on a new worksheet.



# Keeping charts up to date

By default, when you add more data to your spreadsheet, the chart may not include the new data. To fix this, you can adjust the **data range**. Simply click the chart, and it will highlight the data range in your spreadsheet. You can then click and drag the **handle** in the lower-right corner to change the data range.

	B	C	D	E	F
	January	February	March	April	May
	\$18,580	\$49,225	\$16,326	\$10,017	\$26,134
	\$78,970	\$82,262	\$48,640	\$49,985	\$73,428
	\$24,236	\$131,390	\$79,022	\$71,009	\$81,474
	\$16,730	\$19,730	\$12,109	\$11,355	\$17,686
	\$35,358	\$42,685	\$20,893	\$16,065	\$21,388

If you frequently add more data to your spreadsheet, it may become tedious to update the data range. Luckily, there is an easier way. Simply format your source data as a **table**, then create a **chart based on that table**. When you add more data below the table, it will automatically be included in both the table and the chart, keeping everything consistent and up to date.

Watch the video below to learn how to use tables to keep charts up to date.

## Challenge!

1. Open the practice document Excel2013\_Charts\_Practice.xlsx.
2. Use worksheet data to create a **chart**. Use the cell range **A1:F6** as the source data for the chart.
3. Change the **chart layout**. Select **Layout 8**.
4. Apply a **chart style**.
5. **Move** the chart. Move the chart to a **new worksheet** named **Book Sales Data: 2008-2012**.

## Homework

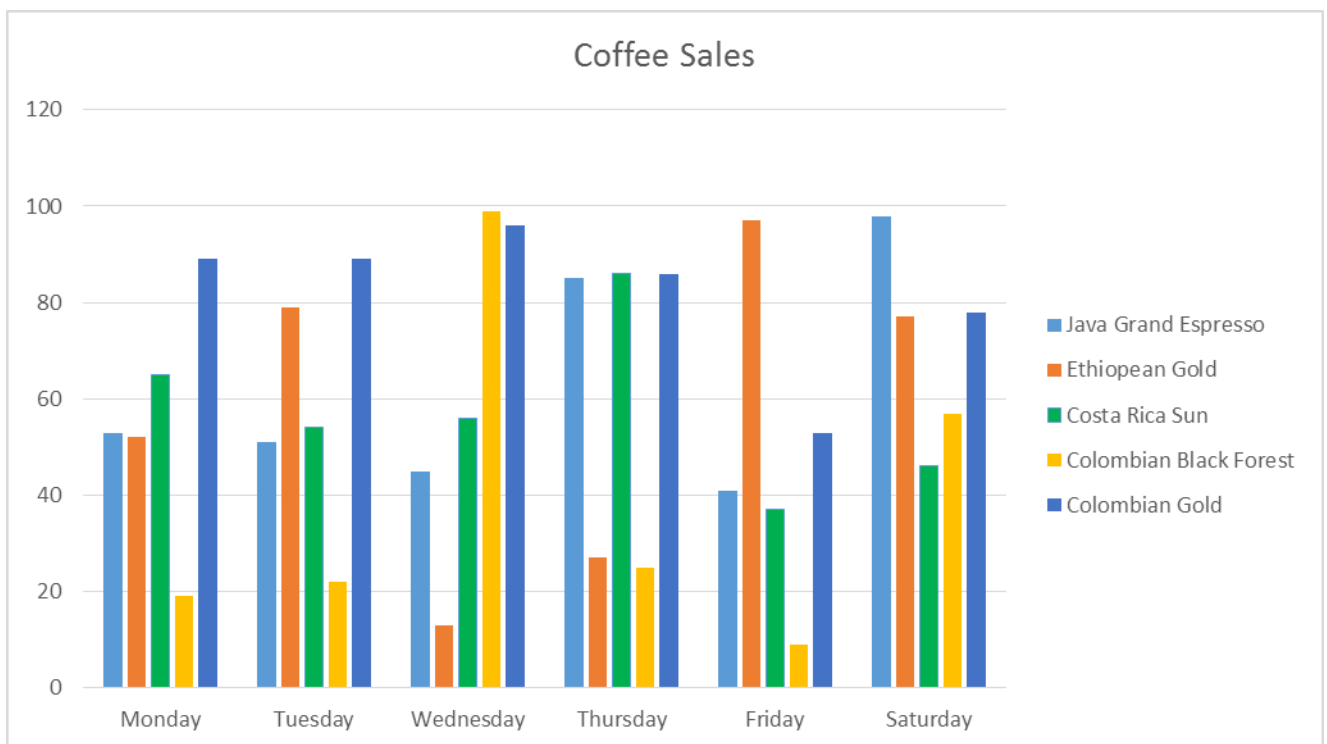
### Column Chart

1. Open the support file: Charts Homework.xlsx.
2. Activate the Sales sheet.
3. Sum up the weekly sales for each blend in column **H**.
4. Add a grand total in cell **H7**.

5. Compute the sale percentage of each blend. Add the formula **=H2/\$H\$7** in cell **I2**.
6. Copy this formula down using the **Fill Handle**. Format the **I** column percentage. In the end, the table should look like below.

	A	B	C	D	E	F	G	H	I
1	Blend	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total week	Percentage
2	Java Grand Espresso	53	51	45	85	41	98	373	21%
3	Ethiopian Gold	52	79	13	27	97	77	345	19%
4	Costa Rica Sun	65	54	56	86	37	46	344	19%
5	Colombian Black	19	22	99	25	9	57	231	13%
6	Colombian Gold	89	89	96	86	53	78	491	28%
7							Grand Total	1784	

1. Select the range **A1:G6**.
2. Insert a Clustered Column chart with the data series the coffee blends.
3. Change the chart title to Coffee Sales
4. Move the Legend to the right.
5. Change the Costa Rica Sun series bar color to Green. In the end, the chart should look like below.



## XY Scatter Chart

1. Open the support file: Charts Homework.xlsx.
2. Activate the Regression sheet.
3. Fill out the formulas to compute the slope (b) and intercept (a) of the linear regression line as in the Lab Excel 1 homework.

4. Add the label Ylin in cell **G1**.
5. Add the formula  $=\$E\$14+\$E\$15*A2$  in cell **G2**.
6. Copy this formula down using the **Fill Handle**. In the end, the table should look like below.

	A	B	C	D	E	F	G
1	X	Y	x	y	x2	xy	Ylin
2	1920	31	-45	-134.9	2025	6070.5	30
3	1930	58	-35	-107.9	1225	3776.5	60
4	1940	93	-25	-72.9	625	1822.5	90
5	1950	125	-15	-40.9	225	613.5	120
6	1960	144	-5	-21.9	25	109.5	151
7	1970	177	5	11.1	25	55.5	181
8	1980	209	15	43.1	225	646.5	211
9	1990	249	25	83.1	625	2077.5	242
10	2000	270	35	104.1	1225	3643.5	272
11	2010	303	45	137.1	2025	6169.5	302
12	1965	165.9			8250	24985	
13							
14				a	-5785.07		
15				b	3.028485		

1. Select the range **A1:B11**. Hold down the **Ctrl** key and add the range **H1:H11** to the selection.
2. Insert a XY Scatter chart.
3. Remove the title.
4. Format the Y series using only red square markers with size 7.
5. Format the Ylin series using only blue line with 3 pt thickness.
6. Scale the X Axis between 1920 and 2010 with a gridline spacing of 10. In the end, the chart should look like below.

