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Paul McFedries

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VISUALLY[™]

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by Paul McFedries

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Paul McFedries is a full-time technical writer. He has been authoring computer books since 1991 and has more than 85 books to his credit. Paul's books have sold more than four million copies worldwide. These books include the Wiley titles *Teach Yourself VISUALLY Windows 10*, *Windows 10 Simplified*, *The Facebook Guide for People Over 50*, *iPhone 6 Portable Genius*, and *iPad Portable Genius*. Paul is also the proprietor of Word Spy (www.wordspy.com), a website that tracks new words and phrases as they enter the language. Paul invites you to drop by his personal website at www.mcfedries.com or follow him on Twitter @wordspy.

Author's Acknowledgments

It goes without saying that writers focus on text, and I certainly enjoyed focusing on the text that you will read in this book. However, this book is more than just the usual collection of words and phrases designed to educate and stimulate the mind. A quick thumb through the pages will show you that this book is also chock-full of treats for the eye, including copious screenshots, beautiful colors, and sharp fonts. Those sure make for a beautiful book, and that beauty comes from a lot of hard work by the production team at SPi Global. Of course, what you read in this book must also be accurate, logically presented, and free of errors. Ensuring all of this was an excellent group of editors that I got to work with directly, including project and copy editor Lynn Northrup and technical editor Donna Baker. Thanks to both of you for your exceptional competence and hard work. Thanks, as well, to Aaron Black for asking me to write this book.

How to Use This Book

Who This Book Is For

This book is for the reader who has never used this particular technology or software application. It is also for readers who want to expand their knowledge.

The Conventions in This Book

1 Steps

This book uses a step-by-step format to guide you easily through each task. Numbered steps are actions you must do; bulleted steps clarify a point, step, or optional feature; and indented steps give you the result.

2 Notes

Notes give additional information — special conditions that may occur during an operation, a situation that you want to avoid, or a cross reference to a related area of the book.

3 Icons and Buttons

Icons and buttons show you exactly what you need to click to perform a step.

4 Tips

Tips offer additional information, including warnings and shortcuts.

5 Bold

Bold type shows command names, options, and text or numbers you must type.

6 Italics

Italic type introduces and defines a new term.

CHAPTER 13
Adding Worksheet Graphics

Insert a Clip Art Image

You can improve the look of an Excel worksheet by adding a clip art image to the sheet. *Clip art* refers to small images or artwork that you can insert into your documents. Excel 2016 does not come with its own clip art, but it does give you access to online clip art collections that contains thousands of images from various categories, such as business, people, nature, and symbols. By default, these images are licensed under Creative Commons, so you can use them without charge.

- 1 Display the worksheet on which you want to insert the clip art image.
- 2 Click the cell where you want the upper-left corner of the image to appear.
- 3 Click the **Insert** tab.
- 4 Click **Illustrations**.
- 5 Click **Online Pictures**.

The Insert Pictures window appears.

- 6 Click **Bing Image Search**.
- 7 Use the text box to type a word that describes the kind of clip art image you want to insert.
- 8 Click **Search**.

Excel displays a list of clip art images that match your search term.

- 9 Click the clip art image you want to use.
- 10 Click **Insert**.

Excel inserts the clip art.

Note: If you need to move or size the clip art, see the "Move or Resize a Graphic" section later in this chapter.

	Team 1	Team 2	Team 3
1 Sales	294,000	523,400	279,000
2 Division I	336,550	394,400	349,623
3 Division II	330,000	341,000	294,500
4 Expenses			
5 Cost of Goods	77,004	84,704	73,154
6 Advertising	60,550	66,600	57,523
7 Rent	25,200	27,700	23,940
8 Supplies	15,900	17,545	15,153
9 Salaries	209,500	251,600	193,425
10 Shipping	176,250	193,875	163,488
11 Utilities	7,300	7,900	6,840

TIPS

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Can I insert other online images?
Yes. If you have connected your Facebook or your Flickr account to Windows 8 or later, you can also use the Facebook or Flickr option to choose a photo. If you are using a Microsoft account with Windows 8 or later, you can use the OneDrive option to select an image from your OneDrive.

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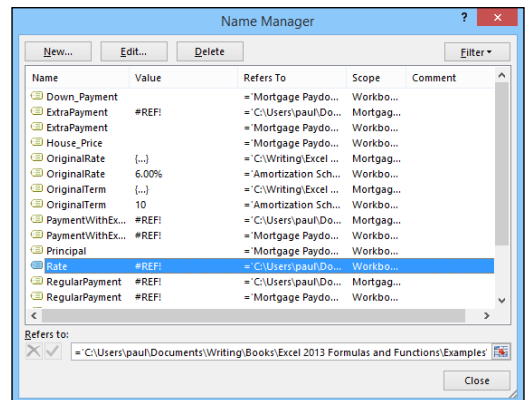
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	A	B
1	Full Name	First Name
2	Maria Anders	Maria
3	Ana Trujillo	Ana
4	Antonio Moreno	Antonio
5	Thomas Hardy	Thomas
6	Christina Berglund	Christina
7	Hanna Moos	Hanna
8	Frédérique Citeaux	Frédérique
9	Martin Sommer	Martin
10	Laurence Leblan	Laurence
11	Elizabeth Lincoln	Elizabeth
12	Victoria Ashworth	Victoria
13	Patricio Simpson	Patricio
14	Francisco Chang	Francisco

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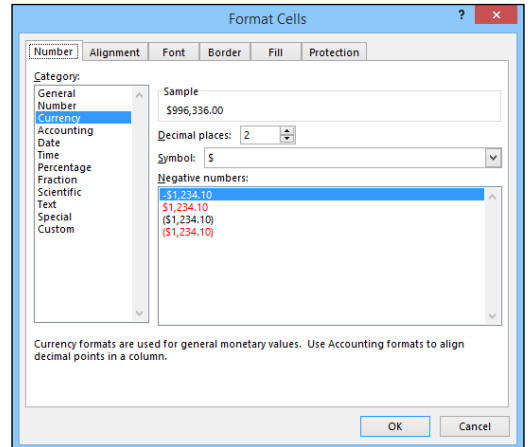
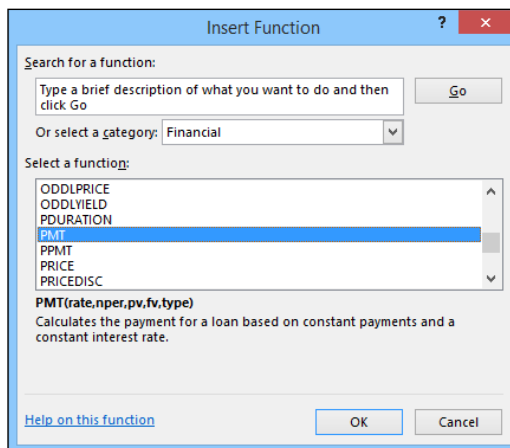


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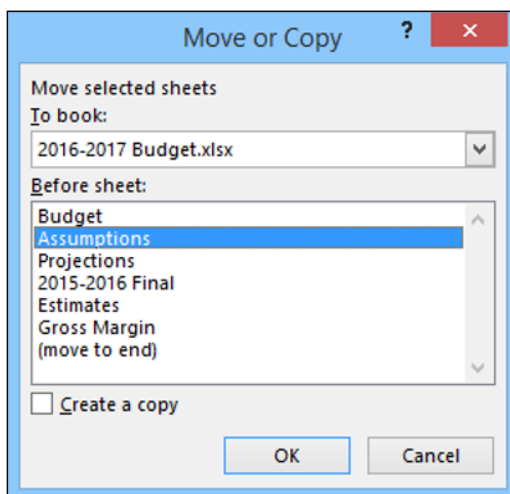
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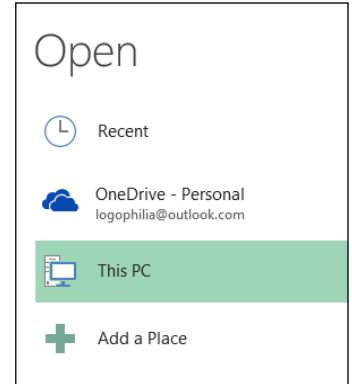
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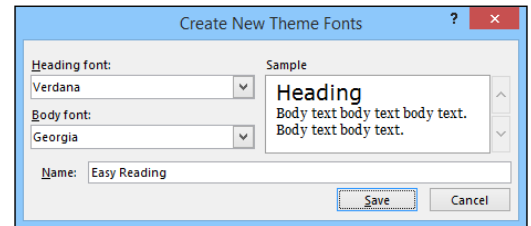
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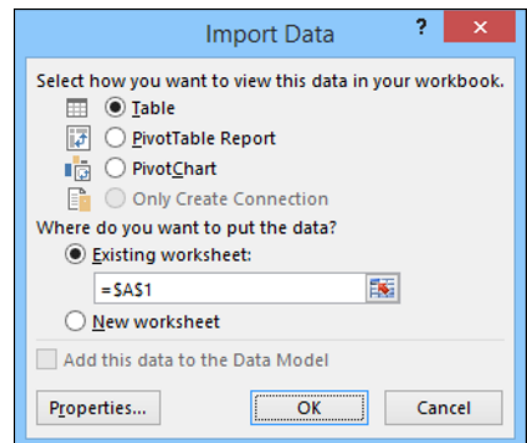
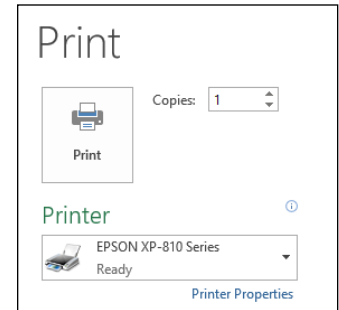


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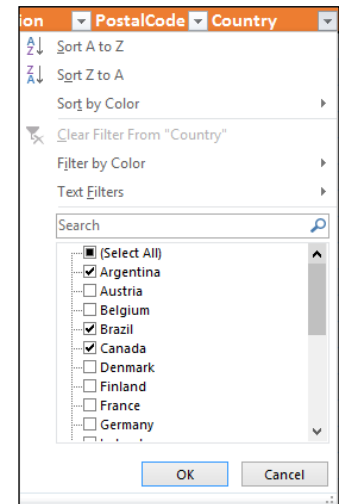
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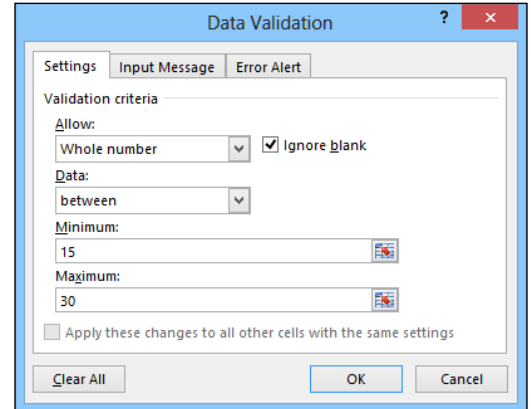
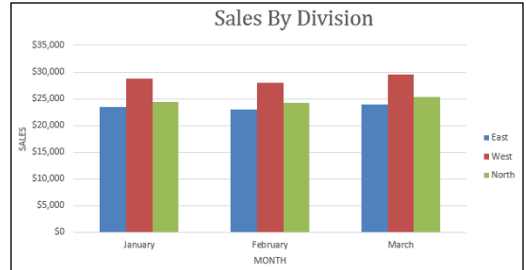


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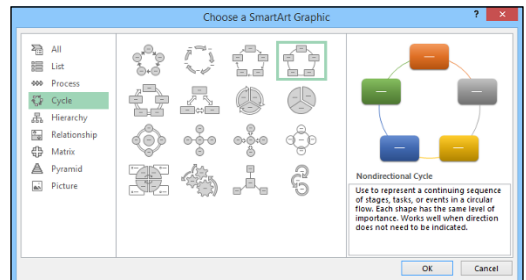
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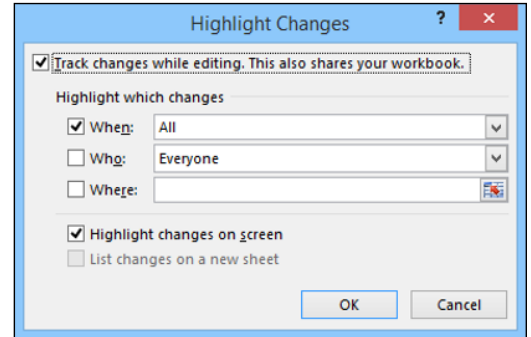
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CHAPTER 1

Working with Ranges

In Excel, a *range* is a collection of two or more cells that you work with as a group rather than separately. This enables you to fill the range with values, move or copy the range, sort the range data, and insert and delete ranges. You learn these and other range techniques in this chapter.

The screenshot displays the Microsoft Excel interface for a file named "2016 Budget - Excel". The ribbon includes FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, and POWER QUERY. The HOME ribbon is active, showing options for Clipboard, Font, Alignment, Number, and Styles. A context menu is open over a range of cells (A3:J17), with the "Hide Rows" option selected. The spreadsheet data is as follows:

	Jan	Feb	Mar	1st Quarter	Apr	May	Jun	2nd Quarter	Jul	3rd Quarter
Sales										
Division I	23,500	23,200	24,000	70,700	25,100	25,000	25,400	75,500	26,000	76,500
Division II	28,750	27,900	29,500	86,150	31,000	30,500	30,000	91,500	31,500	93,000
Division III	24,400	24,300	25,250	73,950	26,600	27,000	26,750	79,350	26,750	80,000
SALES TOTAL	76,650	75,400	78,750	230,800	82,700	82,500	82,150	247,350	83,500	256,300
Expenses										
Cost of Goods	6,132	6,032	6,300	18,464	6,616	6,600	6,572	19,788	6,788	20,000
Advertising	4,600	4,200	5,200	14,000	5,000	5,500	5,250	15,750	5,250	16,000
Rent	2,100	2,100	2,100	6,300	2,100	2,100	2,100	6,300	2,100	6,300
Supplies	1,300	1,200	1,400	3,900	1,300	1,250	1,400	3,950	1,300	4,000
Salaries	16,000	16,000	16,500	48,500	16,500	16,500	17,000	50,000	17,000	51,000
Shipping	14,250	13,750	14,500	42,500	15,000	14,500	14,750	44,250	15,000	44,500
Utilities	500	600	600	1,700	550	600	650	1,800	650	1,850
EXPENSES TOTAL	44,882	43,882	46,600	135,364	47,066	47,050	47,722	141,838	48,270	47,100
GROSS PROFIT	31,768	31,518	32,150	95,436	35,634	35,450	34,428	105,512	35,230	109,200

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Select a Range

To work with a range in Excel, you must first select the cells that you want to include in the range. After you select the range, you can fill it with data, move it to another part of the worksheet, format the cells, and perform the other range-related tasks that you learn about in this chapter.

You can select a range as a rectangular group of cells, as a collection of individual cells, or as an entire row or column.

Select a Range

Select a Rectangular Range

- 1 Position the mouse (☒) over the first cell you want to include in the range.
- 2 Click and drag the ☒ over the cells that you want to include in the range.
- A Excel selects the cells.
- 3 Release the mouse button.

	A	B	C	D	F	G	H
1							
2		Title	Year	Director			
3		Alien	1979	Ridley Scott			
4		An Angel from Texas	1940	Ray Enright			
5		Big	1988	Penny Marshall			
6		The Big Sleep	1946	Howard Hawks			
7		Blade Runner	1982	Ridley Scott			
8		A Christmas Carol	1951	Brian Hurst			
9		Christmas In July	1940	Preston Sturges			
10		A Clockwork Orange	1971	Stanley Kubrick			
11		Die Hard	1991	John McTiernan			
12		Old Ironsides	1926	James Cruze			
13		An Old Spanish Custom	1936	Adrian Brunel			
14		A Perfect World	1993	Clint Eastwood			
15		Perfectly Normal	1990	Yves Simoneau			
16		The Shining	1980	Stanley Kubrick			
17		The Terminator	1984	James Cameron			
18							
19							
20							

Select a Range of Individual Cells

- 1 Click in the first cell that you want to include in the range.
- 2 Hold down **Ctrl** and click in each of the other cells that you want to include in the range.
- B Each time you click in a cell, Excel adds it to the range.
- 3 Release **Ctrl**.

	A	B	C	D	F	G	H
1							
2		Title	Year	Director			
3		Alien	1979	Ridley Scott			
4		An Angel from Texas	1940	Ray Enright			
5		Big	1988	Penny Marshall			
6		The Big Sleep	1946	Howard Hawks			
7		Blade Runner	1982	Ridley Scott			
8		A Christmas Carol	1951	Brian Hurst			
9		Christmas In July	1940	Preston Sturges			
10		A Clockwork Orange	1971	Stanley Kubrick			
11		Die Hard	1991	John McTiernan			
12		Old Ironsides	1926	James Cruze			
13		An Old Spanish Custom	1936	Adrian Brunel			
14		A Perfect World	1993	Clint Eastwood			
15		Perfectly Normal	1990	Yves Simoneau			
16		The Shining	1980	Stanley Kubrick			
17		The Terminator	1984	James Cameron			
18							
19							
20							

Select an Entire Row

- 1 Position the mouse (☒) over the header of the row you want to select (☒ changes to ➡).
- 2 Click the row header.
- C Excel selects the entire row.

To select multiple rows, click and drag across the row headers or hold down **Ctrl** and click each row header.

	A	B	C	D	F	G	H
2		Title	Year	Director			
3		Alien	1979	Ridley Scott			
4		An Angel from Texas	1940	Ray Enright			
5		Big	1988	Penny Marshall			
6		The Big Sleep	1946	Howard Hawks			
7		Blade Runner	1982	Ridley Scott			
8		A Christmas Carol	1951	Brian Hurst			
9		Christmas In July	1940	Preston Sturges			
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13		An Old Spanish Custom	1936	Adrian Brunel			
14		A Perfect World	1993	Clint Eastwood			
15		Perfectly Normal	1990	Yves Simoneau			
16		The Shining	1980	Stanley Kubrick			
17		The Terminator	1984	James Cameron			
18							
19							
20							

Select an Entire Column

- 1 Position the mouse (☒) over the header of the column you want to select (☒ changes to ↓).
- 2 Click the column header.
- D Excel selects the entire column.

To select multiple columns, click and drag across the column headers, or hold down **Ctrl** and click each column header.

	A	B	C	D	F	G	H	I
1								
2		Title	Year	Director				
3		Alien	1979	Ridley Scott				
4		An Angel from Texas	1940	Ray Enright				
5		Big	1988	Penny Marshall				
6		The Big Sleep	1946	Howard Hawks				
7		Blade Runner	1982	Ridley Scott				
8		A Christmas Carol	1951	Brian Hurst				
9		Christmas In July	1940	Preston Sturges				
10		A Clockwork Orange	1971	Stanley Kubrick				
11		Die Hard	1991	John McTiernan				
12		Old Ironsides	1926	James Cruze				
13		An Old Spanish Custom	1936	Adrian Brunel				
14		A Perfect World	1993	Clint Eastwood				
15		Perfectly Normal	1990	Yves Simoneau				
16		The Shining	1980	Stanley Kubrick				
17		The Terminator	1984	James Cameron				
18								
19								
20								
21								

TIPS

Are there keyboard techniques I can use to select a range?

Yes. To select a rectangular range, navigate to the first cell that you want to include in the range, hold down **Shift**, and then press **←** or **↓** to extend the selection. To select an entire row, navigate to any cell in the row and press **Shift** + **Spacebar**.

To select an entire column, navigate to any cell in the column and then press **Ctrl** + **Spacebar**.

Is there an easy way to select every cell in the worksheet?

Yes. There are two methods you can use. Either press **Ctrl** + **A**, or click the **Select All** button (☒) in the upper-left corner of the worksheet (A).

	A	B
1		
2		Title
3		Alien
4		An Angel from Texas

Fill a Range with the Same Data

If you need to fill a range with the same data, you can save time by getting Excel to fill the range for you. The AutoFill feature makes it easy to fill a vertical or horizontal range with the same value, but you can also fill any selected range. This method is much faster than manually entering the same data in each cell.

See the previous section, “Select a Range,” to learn how to select a range of cells.

Fill a Range with the Same Data

Fill a Vertical or Horizontal Range

- 1 In the first cell of the range you want to work with, enter the data you want to fill.
 - 2 Position the mouse (☒) over the bottom-right corner of the cell (☒ changes to +).
 - 3 Click and drag + down to fill a vertical range or across to fill a horizontal range.
 - 4 Release the mouse button.
- A Excel fills the range with the initial cell value.

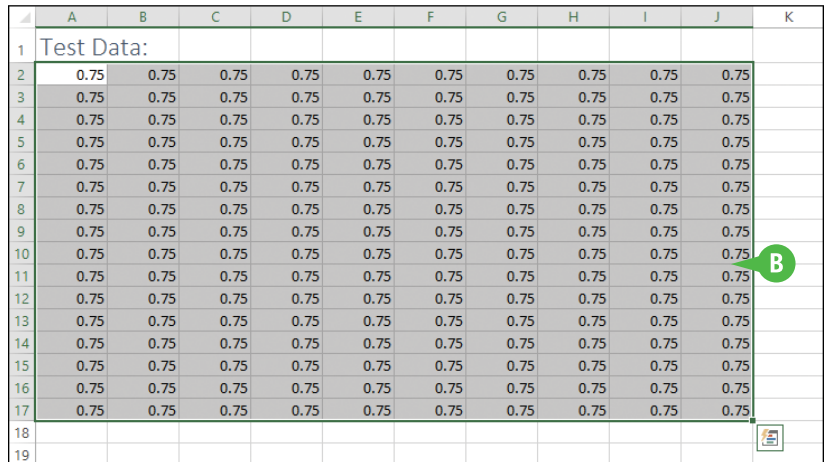
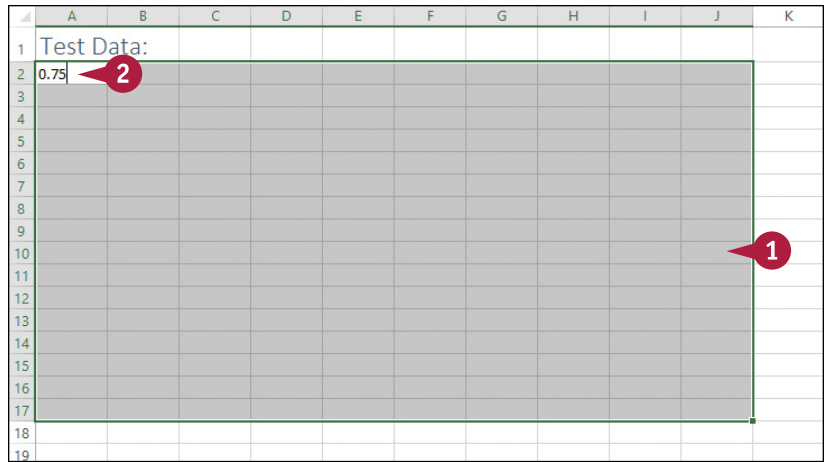
	A	B	C	
1	Category Name	Product Name	Quantity Per Unit	Image
2	Beverages	Chai	10 boxes x 20 bags	
3		Chang	24 - 12 oz bottles	
4		Chartreuse verte	750 cc per bottle	
5		Côte de Blaye	12 - 75 cl bottles	
6		Ipoh Coffee	16 - 500 g tins	
7		Lakkalikööri	500 ml	
8		Laughing Lumberjack Lager	24 - 12 oz bottles	
9		Outback Lager	24 - 355 ml bottles	
10		Rhönbräu Klosterbier	24 - 0.5 l bottles	
11		Sasquatch Ale	24 - 12 oz bottles	
12		Steeleye Stout	24 - 12 oz bottles	
13		Aniseed Syrup	12 - 550 ml bottles	
14		Jeff Anton's Cajun Seasoning	48 - 6 oz jars	
15		Genen Shouyu	24 - 250 ml bottles	

	A	B	C	
1	Category Name	Product Name	Quantity Per Unit	Image
2	Beverages	Chai	10 boxes x 20 bags	
3	Beverages	Chang	24 - 12 oz bottles	
4	Beverages	Chartreuse verte	750 cc per bottle	
5	Beverages	Côte de Blaye	12 - 75 cl bottles	
6	Beverages	Ipoh Coffee	16 - 500 g tins	
7	Beverages	Lakkalikööri	500 ml	
8	Beverages	Laughing Lumberjack Lager	24 - 12 oz bottles	
9	Beverages	Outback Lager	24 - 355 ml bottles	
10	Beverages	Rhönbräu Klosterbier	24 - 0.5 l bottles	
11	Beverages	Sasquatch Ale	24 - 12 oz bottles	
12	Beverages	Steeleye Stout	24 - 12 oz bottles	
13	Beverages	Aniseed Syrup	12 - 550 ml bottles	
14		Jeff Anton's Cajun Seasoning	48 - 6 oz jars	
15		Genen Shouyu	24 - 250 ml bottles	

Fill a Selected Range

- 1 Select the range you want to fill.
- 2 Type the text, number, or other data.
- 3 Press **Ctrl** + **Enter**.

- B** Excel fills the range with the value you typed.



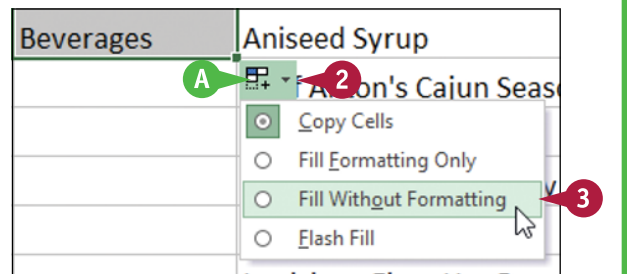
TIP

How do I fill a vertical or horizontal range without also copying the formatting of the original cell?

Follow these steps:

- 1 Perform steps 1 to 4 to fill the data.
- A** Excel displays the AutoFill Options smart tag (📌+).
- 2 Click the **AutoFill Options** ▾.
- 3 Click **Fill Without Formatting**.

Excel removes the original cell's formatting from the copied cells.



Fill a Range with a Series of Values

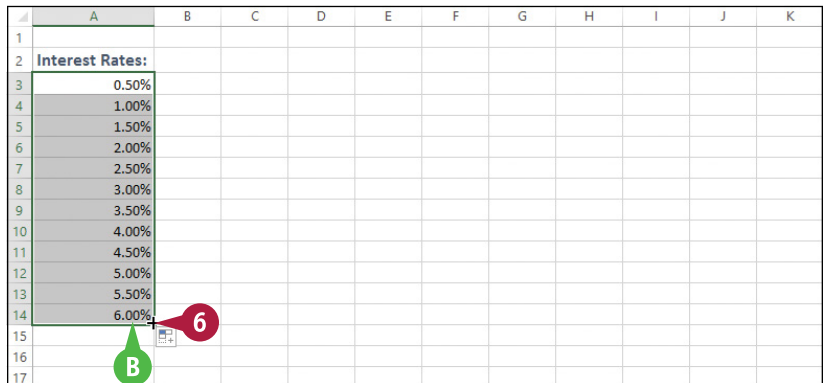
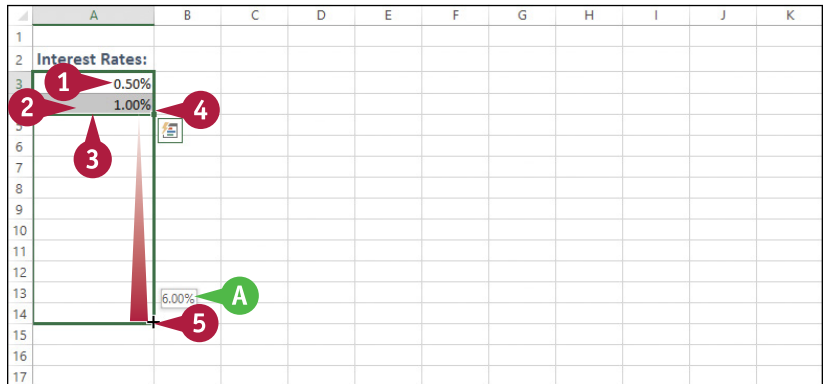
If you need to fill a range with a series of values, you can save time by using the AutoFill feature to create the series for you. AutoFill can fill a series of numeric values such as 5, 10, 15, 20, and so on; a series of date values such as January 1, 2016, January 2, 2016, and so on; or a series of alphanumeric values such as Chapter 1, Chapter 2, Chapter 3, and so on.

You can also create your own series with a custom step value, which determines the numeric difference between each item in the series.

Fill a Range with a Series of Values

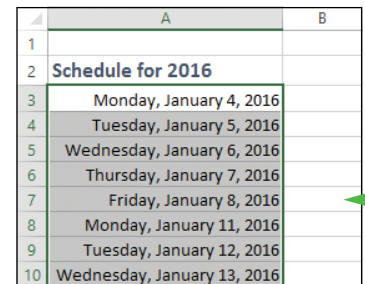
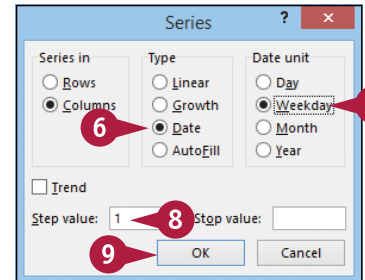
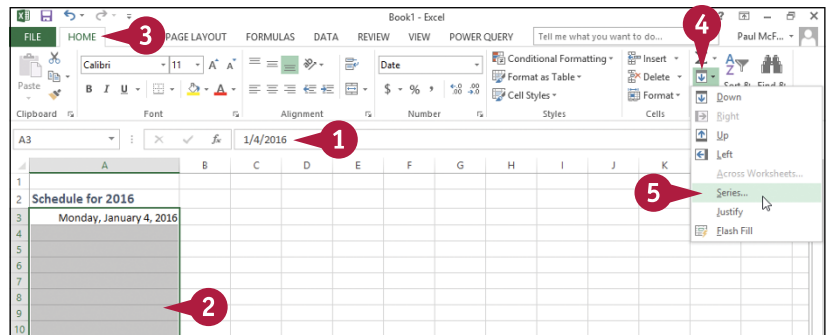
AutoFill a Series of Numeric, Date, or Alphanumeric Values

- 1 Click in the first cell and type the first value in the series.
- 2 Click in an adjacent cell and type the second value in the series.
- 3 Select the two cells.
- 4 Position the mouse (☒) over the bottom-right corner of the second cell (☒ changes to ☒).
- 5 Click and drag ☒ down to fill a vertical range or across to fill a horizontal range.
 - A As you drag through each cell, Excel displays the series value that it will add to the cell.
- 6 Release the mouse button.
 - B Excel fills the range with a series that continues the pattern of the initial two cell values.



Fill a Custom Series of Values

- 1 Click in the first cell and type the first value in the series.
- 2 Select the range you want to fill, including the initial value.
- 3 Click the **Home** tab.
- 4 Click **Fill** (↓).
- 5 Click **Series**.
The Series dialog box appears.
- 6 In the Type group, select the type of series you want to fill (○ changes to ●).
- 7 If you selected Date in step 6, select an option in the Date unit group (○ changes to ●).
- 8 In the Step value text box, type the value you want to use.
- 9 Click **OK**.
C Excel fills the range with the series you created.



TIP

Can I create my own AutoFill series?

Yes. You can create a *custom list*, which is a series of text values. When you add the first value in your custom list, you can then use AutoFill to fill a range with the rest of the series. Follow these steps:

- 1 Click the **File** tab.
- 2 Click **Options**.
The Excel Options dialog box appears.
- 3 Click **Advanced**.
- 4 Scroll down to the General section and then click **Edit Custom Lists**.
The Custom Lists dialog box appears.
- 5 Click **NEW LIST**.
- 6 In the List entries box, type each item in your list, and press **Enter** after each item.
- 7 Click **Add**.
- 8 Click **OK** to return to the Excel Options dialog box.
- 9 Click **OK**.

Flash Fill a Range

You can save time and effort by using the Flash Fill feature in Excel to automatically fill a range of data based on a sample pattern that you provide.

Although there are many ways to use Flash Fill, the two most common are flash filling a range with extracted data and flash filling a range with formatted data. For example, if you have a column of full names, you might want to create a new column that includes just the first names extracted from the original column. Similarly, if you have a column of phone numbers in the form 1234567890, you might want a new column that formats the numbers as (123) 456-7890.

Flash Fill a Range

Flash Fill a Range with Extracted Data

- 1 Make sure the column of original data has a heading.
- 2 Type a heading for the column of extracted data.
- 3 Type the first value you want in the new column.
- 4 Begin typing the second value.
- A Excel recognizes the pattern and displays suggestions for the rest of the column.
- 5 Press **Enter**.
- B Excel flash fills the column with the extracted data.

	A	B	C	D	E
1	Full Name	First Name	Position	Phone	
2	Maria Anders	Maria	Sales Representative	3175551262	
3	Ana Trujillo	Ana	Owner	3175552505	
4	Antonio Moreno	Antonio	Owner	3175559773	
5	Thomas Hardy	Thomas	Sales Representative	3175556469	
6	Christina Berglund	Christina	Order Administrator	3175556184	
7	Hanna Moos	Hanna	Sales Representative	3175551740	
8	Frédérique Citeaux	Frédérique	Marketing Manager	3175551573	
9	Martin Sommer	Martin	Owner	3175558600	
10	Laurence Leblanc	Laurence	Owner	3175558383	
11	Elizabeth Lincoln	Elizabeth	Accounting Manager	3175554298	
12	Victoria Ashworth	Victoria	Sales Representative	3175553202	
13	Patricio Simpson	Patricio	Sales Agent	3175554835	
14	Francisco Chang	Francisco	Marketing Manager	3175553170	
15	Yang Wang	Yang	Owner	3175558150	
16	Pedro Afonso	Pedro	Sales Associate	3175550751	

	A	B	C	D	E
1	Full Name	First Name	Position	Phone	
2	Maria Anders	Maria	Sales Representative	3175551262	
3	Ana Trujillo	Ana	Owner	3175552505	
4	Antonio Moreno	Antonio	Owner	3175559773	
5	Thomas Hardy	Thomas	Sales Representative	3175556469	
6	Christina Berglund	Christina	Order Administrator	3175556184	
7	Hanna Moos	Hanna	Sales Representative	3175551740	
8	Frédérique Citeaux	Frédérique	Marketing Manager	3175551573	
9	Martin Sommer	Martin	Owner	3175558600	
10	Laurence Leblanc	Laurence	Owner	3175558383	
11	Elizabeth Lincoln	Elizabeth	Accounting Manager	3175554298	
12	Victoria Ashworth	Victoria	Sales Representative	3175553202	
13	Patricio Simpson	Patricio	Sales Agent	3175554835	
14	Francisco Chang	Francisco	Marketing Manager	3175553170	
15	Yang Wang	Yang	Owner	3175558150	
16	Pedro Afonso	Pedro	Sales Associate	3175550751	

Flash Fill a Range with Formatted Data

- 1 Make sure the column of original data has a heading.
- 2 Type a heading for the new column of formatted data.
- 3 Type the first value you want in the new column.
- 4 Begin typing the second value.
- C Excel recognizes the pattern and displays suggestions for the rest of the column.
- 5 Press **Enter**.
- D Excel flash fills the column with the formatted data.

	A	B	C	D	E	F
1	Full Name	First Name	Position	Phone	Phone Number	
2	Maria Anders	Maria	Sales Representative	3175551262	(317) 555-1262	
3	Ana Trujillo	Ana	Owner	3175552505	(317) 555-2505	
4	Antonio Moreno	Antonio	Owner	3175559773	(317) 555-9773	
5	Thomas Hardy	Thomas	Sales Representative	3175556469	(317) 555-6469	
6	Christina Berglund	Christina	Order Administrator	3175556184	(317) 555-6184	
7	Hanna Moos	Hanna	Sales Representative	3175551740	(317) 555-1740	
8	Frédérique Citeaux	Frédérique	Marketing Manager	3175551573	(317) 555-1573	
9	Martin Sommer	Martin	Owner	3175558600	(317) 555-8600	
10	Laurence Lebihan	Laurence	Owner	3175558383	(317) 555-8383	
11	Elizabeth Lincoln	Elizabeth	Accounting Manager	3175554298	(317) 555-4298	
12	Victoria Ashworth	Victoria	Sales Representative	3175553202	(317) 555-3202	
13	Patricio Simpson	Patricio	Sales Agent	3175554835	(317) 555-4835	
14	Francisco Chang	Francisco	Marketing Manager	3175553170	(317) 555-3170	
15	Yang Wang	Yang	Owner	3175558150	(317) 555-8150	
16	Pedro Afonso	Pedro	Sales Associate	3175550751	(317) 555-0751	
17	Elizabeth Brown	Elizabeth	Sales Representative	3175555978	(317) 555-5978	
18	Sven Ottlieb	Sven	Order Administrator	3175553660	(317) 555-3660	

	A	B	C	D	E	F
1	Full Name	First Name	Position	Phone	Phone Number	
2	Maria Anders	Maria	Sales Representative	3175551262	(317) 555-1262	
3	Ana Trujillo	Ana	Owner	3175552505	(317) 555-2505	
4	Antonio Moreno	Antonio	Owner	3175559773	(317) 555-9773	
5	Thomas Hardy	Thomas	Sales Representative	3175556469	(317) 555-6469	
6	Christina Berglund	Christina	Order Administrator	3175556184	(317) 555-6184	
7	Hanna Moos	Hanna	Sales Representative	3175551740	(317) 555-1740	
8	Frédérique Citeaux	Frédérique	Marketing Manager	3175551573	(317) 555-1573	
9	Martin Sommer	Martin	Owner	3175558600	(317) 555-8600	
10	Laurence Lebihan	Laurence	Owner	3175558383	(317) 555-8383	
11	Elizabeth Lincoln	Elizabeth	Accounting Manager	3175554298	(317) 555-4298	
12	Victoria Ashworth	Victoria	Sales Representative	3175553202	(317) 555-3202	
13	Patricio Simpson	Patricio	Sales Agent	3175554835	(317) 555-4835	
14	Francisco Chang	Francisco	Marketing Manager	3175553170	(317) 555-3170	
15	Yang Wang	Yang	Owner	3175558150	(317) 555-8150	
16	Pedro Afonso	Pedro	Sales Associate	3175550751	(317) 555-0751	
17	Elizabeth Brown	Elizabeth	Sales Representative	3175555978	(317) 555-5978	
18	Sven Ottlieb	Sven	Order Administrator	3175553660	(317) 555-3660	

TIPS

Why do I not see the automatic Flash Fill suggestions when I type the sample data?

For Flash Fill's automatic suggestions to appear, you must have headings at the top of both the column of original data and the column you are using for the filled data. Also, the flash fill column must be adjacent to the original column and the sample entries you make in the fill column must occur one after the other. Finally, note that Flash Fill's automatic suggestions usually only work with text data, not numeric data.

Can I still use Flash Fill even though I do not see the automatic suggestions?

Yes, you can still invoke Flash Fill on any range by running the Ribbon command. In the fill range, type the first value, then select that value and the rest of the fill range. Click the **Data** tab and then click **Flash Fill** (🔍). Excel flash fills the selected range.

Move or Copy a Range

If your worksheet is not set up the way you want, you can restructure or reorganize the worksheet by moving an existing range to a different part of the sheet.

You can also make a copy of a range, which is a useful technique if you require a duplicate of the range elsewhere, or if you require a range that is similar to an existing range. In the latter case, after you copy the range, you can then edit the copied version of the data as needed.

Move or Copy a Range

Move a Range

- 1 Select the range you want to move.
 - 2 Position the mouse (☒) over any outside border of the range (☒ changes to ☒).
 - 3 Click and drag the range to the new location (☒ changes to ☒).
 - 4 Release the mouse button.
- A Excel displays an outline of the range.
- B Excel displays the address of the new location.
- C Excel moves the range to the new location.

	A	B	C	D	E	F	G	H	I
1	Loan Payment Analysis				Period	Principal	Interest	Total	
2	Interest Rate (Annual)	6.00%			1	(\$143.33)	(\$50.00)	(\$193.33)	
3	Periods (Years)	5			2	(\$144.04)	(\$49.28)	(\$193.33)	
4	Principal	\$10,000			3	(\$144.76)	(\$48.56)	(\$193.33)	
5	Monthly Payment	(\$193.33)			4	(\$145.49)	(\$47.84)	(\$193.33)	
6	Total Loan Costs	(\$1,599.68)			5	(\$146.22)	(\$47.11)	(\$193.33)	
7					6	(\$146.95)	(\$46.38)	(\$193.33)	
8					7	(\$147.68)	(\$45.65)	(\$193.33)	
9					8	(\$148.42)	(\$44.91)	(\$193.33)	
10					9	(\$149.16)	(\$44.17)	(\$193.33)	
11					10	(\$149.91)	(\$43.42)	(\$193.33)	
12					60	(\$192.37)	(\$0.96)	(\$193.33)	

	A	B	C	D	E	F	G	H
1	Loan Payment Analysis							
2	Interest Rate (Annual)	6.00%						
3	Periods (Years)	5						
4	Principal	\$10,000						
5	Monthly Payment	(\$193.33)						
6	Total Loan Costs	(\$1,599.68)						
9	Period	Principal	Interest	Total				
10	1	(\$143.33)	(\$50.00)	(\$193.33)				
11	2	(\$144.04)	(\$49.28)	(\$193.33)				
12	3	(\$144.76)	(\$48.56)	(\$193.33)				
13	4	(\$145.49)	(\$47.84)	(\$193.33)				
14	5	(\$146.22)	(\$47.11)	(\$193.33)				
15	6	(\$146.95)	(\$46.38)	(\$193.33)				
16	7	(\$147.68)	(\$45.65)	(\$193.33)				
17	8	(\$148.42)	(\$44.91)	(\$193.33)				
18	9	(\$149.16)	(\$44.17)	(\$193.33)				
19	10	(\$149.91)	(\$43.42)	(\$193.33)				
20	60	(\$192.37)	(\$0.96)	(\$193.33)				

Copy a Range

- 1 Select the range you want to copy.
 - 2 Press and hold **Ctrl**.
 - 3 Position the mouse (⊕) over any outside border of the range (⊕ changes to ↻).
 - 4 Click and drag the range to the location where you want the copy to appear.
- D Excel displays an outline of the range.
- E Excel displays the address of the new location.
- 5 Release the mouse button.
 - 6 Release **Ctrl**.
 - F Excel creates a copy of the range in the new location.

	A	B	C	D	E	F	G	H	I	J	
1	Loan Payment Analysis										
2											
3	Scenario #1										
4	Interest Rate (Annual)	6.00%									
5	Periods (Years)	5									
6	Principal	\$10,000									
7	Monthly Payment	(\$193.33)									
8											
9	Scenario #2										
10											
11											
12											
13											
14											
15											
16											

	A	B	C	D	E	F	G	H	I	J	
1	Loan Payment Analysis										
2											
3	Scenario #1										
4	Interest Rate (Annual)	6.00%									
5	Periods (Years)	5									
6	Principal	\$10,000									
7	Monthly Payment	(\$193.33)									
8											
9	Scenario #2										
10	Interest Rate (Annual)	6.00%									
11	Periods (Years)	5									
12	Principal	\$10,000									
13	Monthly Payment	(\$193.33)									
14											
15											
16											

TIPS

Can I move or copy a range to another worksheet?

Yes. Click and drag the range as described in this section. Remember to hold down **Ctrl** if you are copying the range. Press and hold **Alt** and then drag the mouse pointer over the tab of the sheet you want to use as the destination. Excel displays the worksheet. Release **Alt** and then drop the range on the worksheet.

Can I move or copy a range to another workbook?

Yes. If you can see the other workbook on-screen, click and drag the range as described in this section, and then drop it on the other workbook. Remember to hold down **Ctrl** if you are copying the range. Otherwise, select the range, click the **Home** tab, click **Cut** (✂) to move the range or **Copy** (📄) to copy it, switch to the other workbook, select the cell where you want the range to appear, click **Home**, and then click **Paste** (📄).

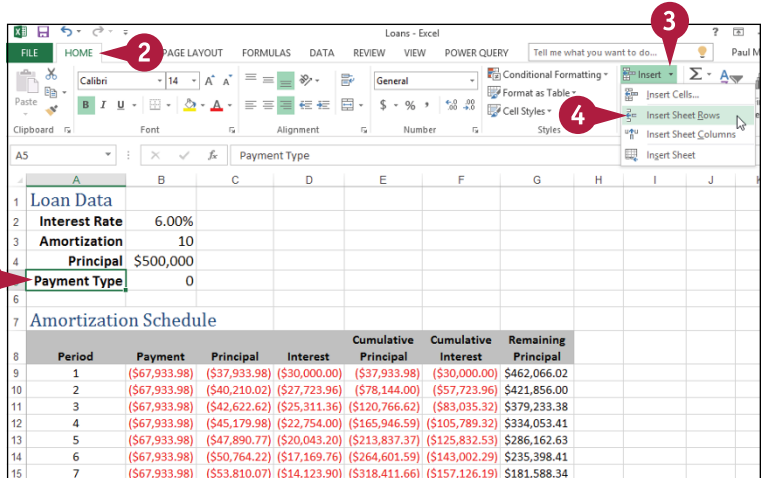
Insert a Row or Column

You can insert a row or column into your existing worksheet data to accommodate more information. The easiest way to add more information to a worksheet is to add it to the right or at the bottom of your existing data. However, you will often find that the new information you need to add fits naturally within the existing data. In such cases, you first need to insert a new row or column in your worksheet at the place where you want the new data to appear, and then add the new information in the blank row or column.

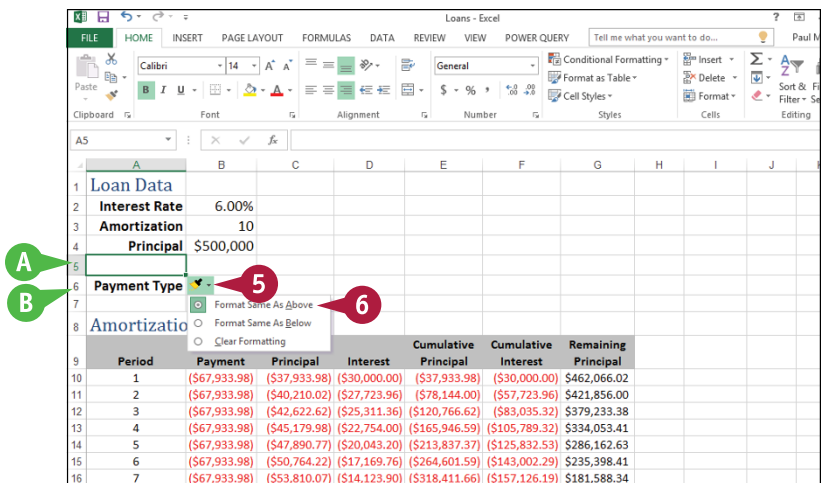
Insert a Row or Column

Insert a Row

- 1 Click any cell in the row below where you want to insert the new row.
- 2 Click the **Home** tab.
- 3 Click the **Insert** ▾.
- 4 Click **Insert Sheet Rows**.

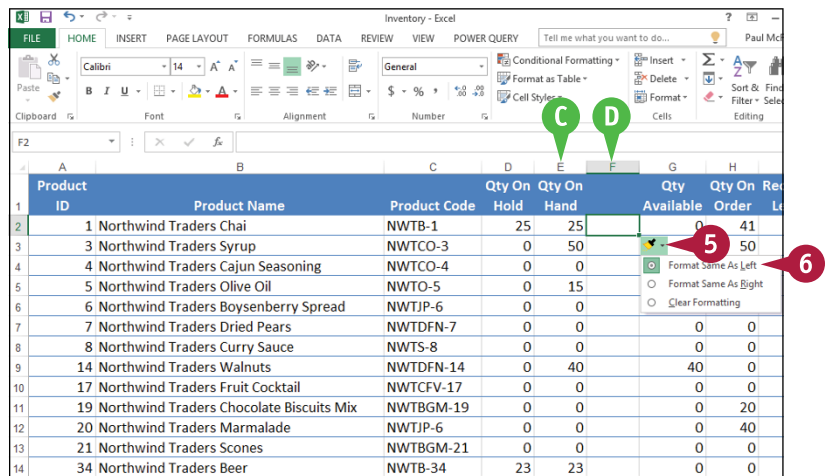
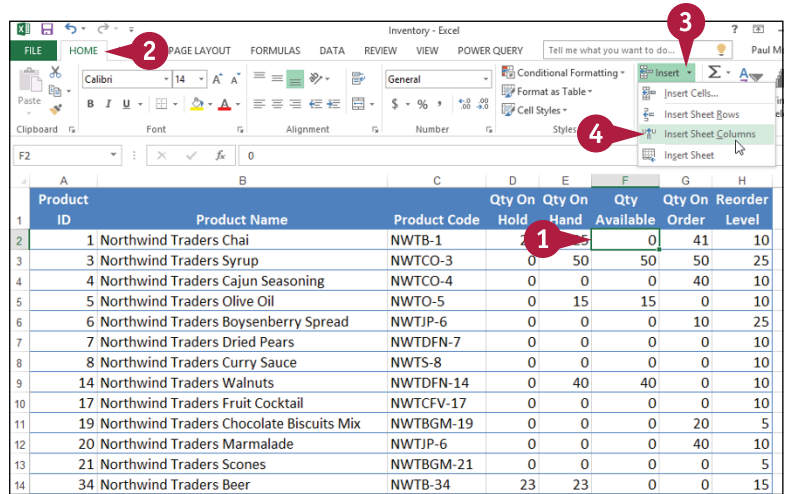


- A Excel inserts the new row.
 - B The rows below the new row are shifted down.
- 5 Click the **Insert Options** smart tag (👉).
 - 6 Select a formatting option for the new row (○ changes to ●).



Insert a Column

- 1 Click any cell in the row to the right of where you want to insert the new column.
 - 2 Click the **Home** tab.
 - 3 Click the **Insert** ▾.
 - 4 Click **Insert Sheet Columns**.
- C Excel inserts the new column.
- D The columns to the right of the new column are shifted to the right.
- 5 Click the **Insert Options** smart tag (👉).
 - 6 Select a formatting option for the new column (○ changes to ●).



TIP

Can I insert more than one row or column at a time?

Yes. You can insert as many new rows or columns as you need. First, select the same number of rows or columns that you want to insert. (See the “Select a Range” section earlier in this chapter to learn how to select rows and columns.) For example, if you want to insert four rows, select four existing rows. For rows, be sure to select existing rows below where you want the new rows inserted and then follow steps 2 to 4 in the “Insert a Row” subsection. For columns, be sure to select existing columns to the right of where you want to insert the new columns and then follow steps 2 to 4 in the “Insert a Column” subsection.

Insert a Cell or Range

If you need to add data to an existing range, you can insert a single cell or a range of cells within that range. When you insert a cell or range, Excel shifts the existing data to accommodate the new cells.

Although it is often easiest to create room for new data within a range by inserting an entire row or column, as explained in the previous section, “Insert a Row or Column,” this causes problems for some types of worksheet layouts. (See the first tip to learn more.) You can work around such problems by inserting just a cell or range.

Insert a Cell or Range

- 1 Select the cell or range where you want the inserted cell or range to appear.

	A	B	C	D	E	F	G	H	I	J	K
1	Loan Payment Analysis				Period	Principal	Interest	Total			
2	Interest Rate (Annual)	6.00%			1	(\$143.33)	(\$50.00)	(\$193.33)			
3	Periods (Years)	5			2	(\$144.04)	(\$49.28)	(\$193.33)			
4	Principal	\$10,000			3	(\$144.76)	(\$48.56)	(\$193.33)			
5	Monthly Payment	(\$193.33)			4	(\$145.49)	(\$47.84)	(\$193.33)			
6	Total Loan Costs	(\$1,599.68)			5	(\$146.22)	(\$47.11)	(\$193.33)			
7					6	(\$146.95)	(\$46.38)	(\$193.33)			
8					7	(\$147.68)	(\$45.65)	(\$193.33)			
9					8	(\$148.42)	(\$44.91)	(\$193.33)			
10					9	(\$149.16)	(\$44.17)	(\$193.33)			
11					10	(\$149.91)	(\$43.42)	(\$193.33)			
12					60	(\$192.37)	(\$0.96)	(\$193.33)			
13											

- 2 Click the **Home** tab.
- 3 Click the **Insert** dropdown arrow.
- 4 Click **Insert Cells**.

Note: You can also press **Ctrl** + **Shift** + **=**.

	A	B	C	D	E	F	G	H	I	J	K
1	Loan Payment Analysis				Period	Principal	Interest	Total			
2	Interest Rate (Annual)	6.00%			1	(\$143.33)	(\$50.00)	(\$193.33)			
3	Periods (Years)	5			2	(\$144.04)	(\$49.28)	(\$193.33)			
4	Principal	\$10,000			3	(\$144.76)	(\$48.56)	(\$193.33)			
5	Monthly Payment	(\$193.33)			4	(\$145.49)	(\$47.84)	(\$193.33)			
6	Total Loan Costs	(\$1,599.68)			5	(\$146.22)	(\$47.11)	(\$193.33)			
7					6	(\$146.95)	(\$46.38)	(\$193.33)			
8					7	(\$147.68)	(\$45.65)	(\$193.33)			
9					8	(\$148.42)	(\$44.91)	(\$193.33)			
10					9	(\$149.16)	(\$44.17)	(\$193.33)			
11					10	(\$149.91)	(\$43.42)	(\$193.33)			
12					60	(\$192.37)	(\$0.96)	(\$193.33)			
13											