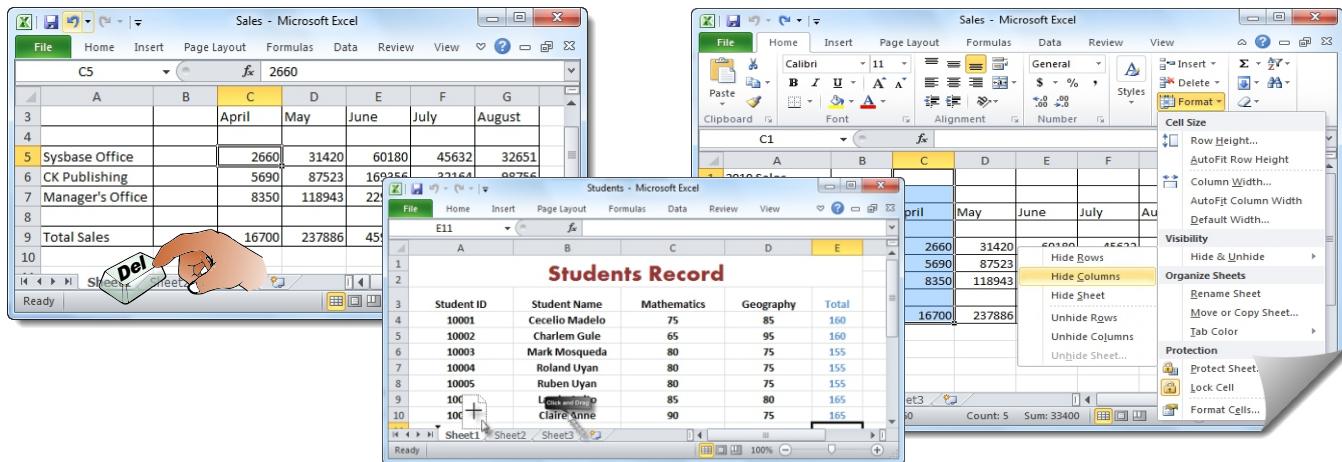


# Lesson 2

## Word Watch

- active cell
- active worksheet
- navigation
- column width
- row height
- transpose
- freeze
- freeze panes



# Working with Worksheets and Data

## Learning Objectives

After completing this lesson, you should be able to:

- move within the worksheets;
- name, add, delete, move, copy worksheet(s);
- move, copy, delete data in cell(s);
- add & delete column(s) or row(s);
- center data across columns;
- set column width and row height;
- hide, transpose, freeze column(s) and row(s); and
- find & replace a data.

## Navigating Worksheets

As you enter and edit data, you will need to move through the worksheet. You can use several methods to move around an Excel worksheet. For example, you can move around using your mouse by clicking the cell in which you want to add or edit data. You can also use the keyboard arrows and Tab key to move from cell to cell, or you can utilize a combination of both the mouse and keyboard. You can use the scroll bars to move around a large worksheet.

The screenshot shows a Microsoft Excel window titled "Students - Microsoft Excel". The ribbon is visible with the "Data" tab selected. The main area displays a table titled "Students Record" with data for 8 students across columns for Student ID, Name, Mathematics, Geography, and Total. The active cell is A3, which contains the value "Student ID". The "Data Tools" group on the ribbon includes "Text to Columns", "Remove Duplicates", and "Outline". The status bar at the bottom shows "Ready".

### Active Cell

It is the current cell in which you enter or edit data.

### Active Worksheet

It is the current worksheet. You can click worksheet tabs to make other sheets active.

### Worksheet Navigation Buttons

Use them to move among worksheets.

### View Buttons

Use them to move among Normal, Page Layout, and Page Break views.

### Horizontal Scroll Bar

It is used to move back and forth horizontally across a worksheet.

### Vertical Scroll Bar

It is used to move up and down a worksheet.

## Worksheet Navigation Methods

Mouse Navigation	
Mouse Action	Action Performed
Click a cell	Selects a cell
Click and drag across cells	Selects any cells you drag across
Double-click a cell	Selects a cell and inserts a cursor ready to enter or edit data
Double-click a cell border	Jumps to the corresponding cell
Click a row number	Selects the entire row
Click a column letter	Selects the entire column
Click and drag row numbers	Selects consecutive rows
Click and drag column letters	Selects consecutive columns
Click in the box at the upper-right corner intersection of the rows and columns	Selects the entire worksheet

Keyboard Navigation	
Keyboard Keys	Action Performed
	Moves right one cell
	Moves left one cell
	Moves down one cell
	Moves up one cell
<b>Page Down</b>	Moves down one screen
<b>Page Up</b>	Moves up one screen
<b>Ctrl + End</b>	Jumps to the lower-right corner of the working area
<b>Ctrl + Home</b>	Jumps to the first cell in the worksheet

Worksheet Navigation Buttons	
Worksheet Buttons	Action Performed
	Scrolls to the first sheet in the workbook
	Scrolls to the previous sheet
	Scrolls to the next sheet
	Scrolls to the last sheet in the workbook

## Naming a Worksheet

You can name your Excel worksheets to help identify the content. For example, if your workbook contains four sheets, each contains different sales details of the quarter, you can give each sheet a unique name, such as Quarter 1, Quarter 2, and so on.

### Name a Worksheet

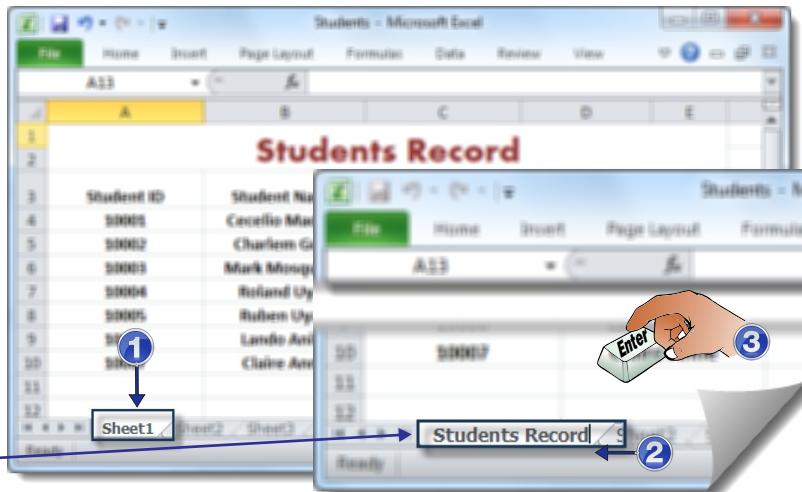
- Double-click the sheet tab that you want to rename.

The current name is highlighted.

- Type a new name for the worksheet.

- Press ENTER.

Excel assigns the name to the new worksheet.



## Adding a Worksheet

You can add a worksheet to your workbook to create another sheet in which to enter data. By default, every Excel workbook opens with three sheets. You can add more sheets as you need them. Excel adds a new worksheet immediately after the last worksheet on the right. You can move worksheets to reposition their order.

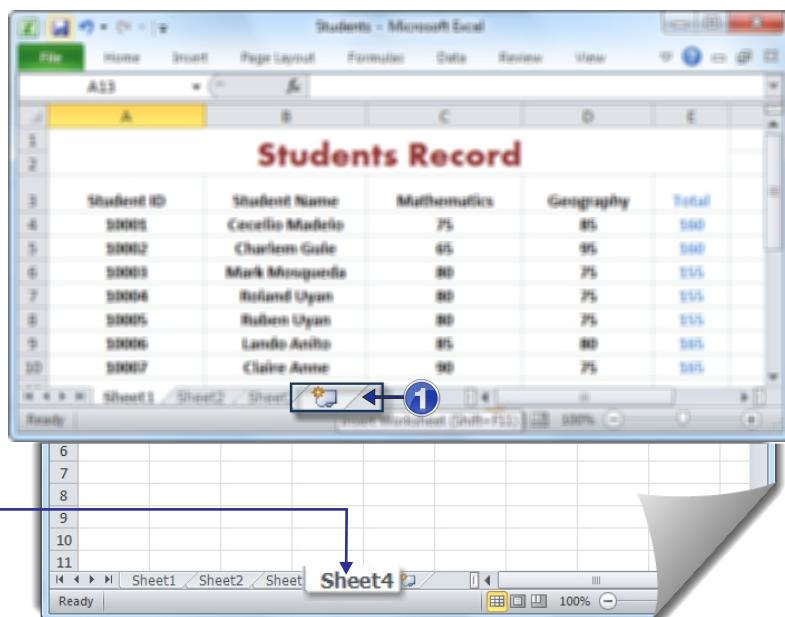
### Add a Worksheet

- Click the Insert Worksheet icon (✿).

A new worksheet appears.

- You can click the Home tab, click Insert (Insert Worksheet+F1), and then click Insert Sheet.

Excel adds a new worksheet and a default worksheet name.



# Deleting a Worksheet

You can delete a worksheet that you no longer need in your workbook. Always check the sheet's contents before deleting it to avoid removing any important data. After you delete a worksheet, it is permanently removed from the workbook file.

## Delete a Worksheet

① Right-click the worksheet tab.

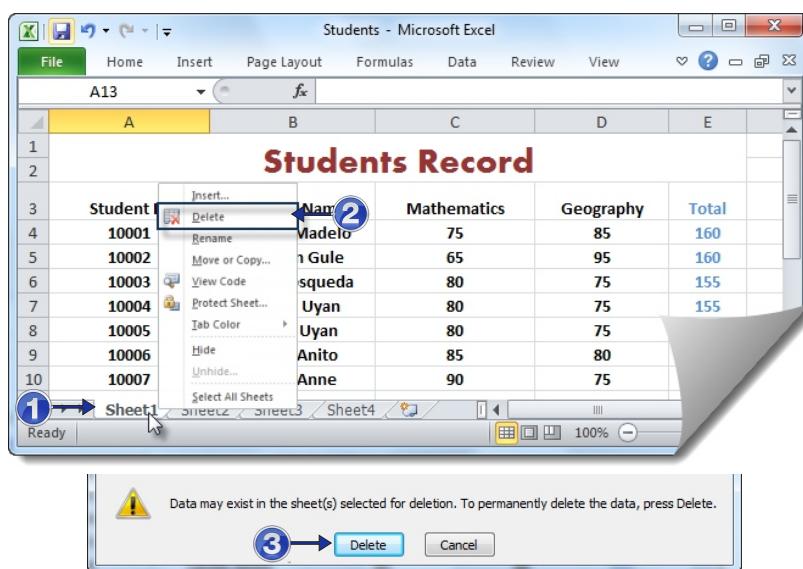
② Click Delete button.

- If the worksheet is blank, Excel deletes it immediately.

If the worksheet contains any data, Excel prompts you to confirm the deletion.

③ From the dialog box that appear, click Delete.

Excel deletes the worksheet.



## Moving a Worksheet

You can move a worksheet within a workbook to rearrange the sheet order. For example, you want to position the sheet you use the most as the first sheet in the workbook.

## Move a Worksheet

① Click the tab of the worksheet that you want to move.

② Drag the tab to move its worksheet to a new position in the list of worksheets.

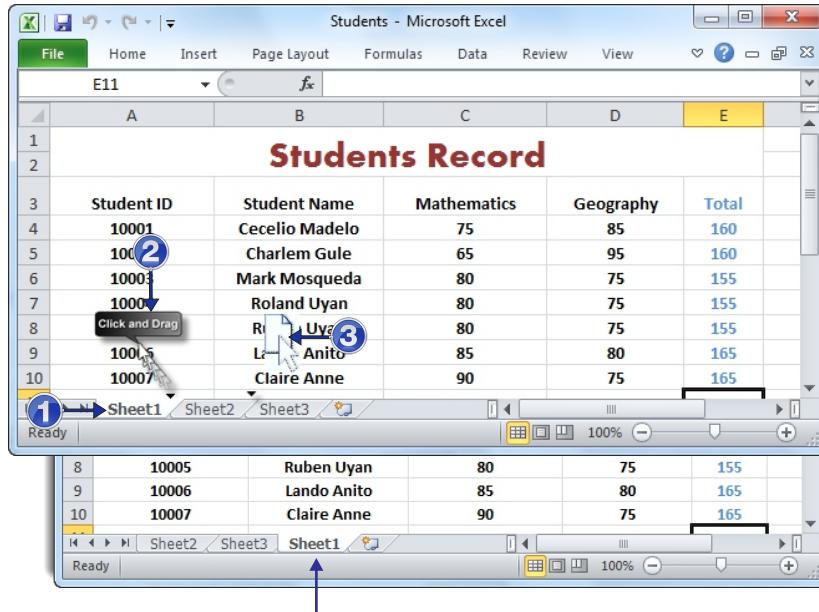
The mouse pointer ( ) changes to the paper sheet icon ( ).

A small black triangle icon ( ) keeps track of the sheet's location in the group while you drag.

- You can also right-click the worksheet tab and click Move or Copy to move worksheets with the Move or Copy dialog box.

③ Release the mouse button.

The worksheet is then moved.



## Copying a Worksheet

You can copy a worksheet within a workbook. For example, you want to copy a sheet to use as a starting point for a worksheet containing new, yet similar, data.

### Copy a Worksheet

- 1 Click the worksheet tab that you want to copy.
- 2 Press CTRL.

The  changes to .

- 3 Drag  the worksheet tab to a new position in the list of sheets where you want the copy to appear.

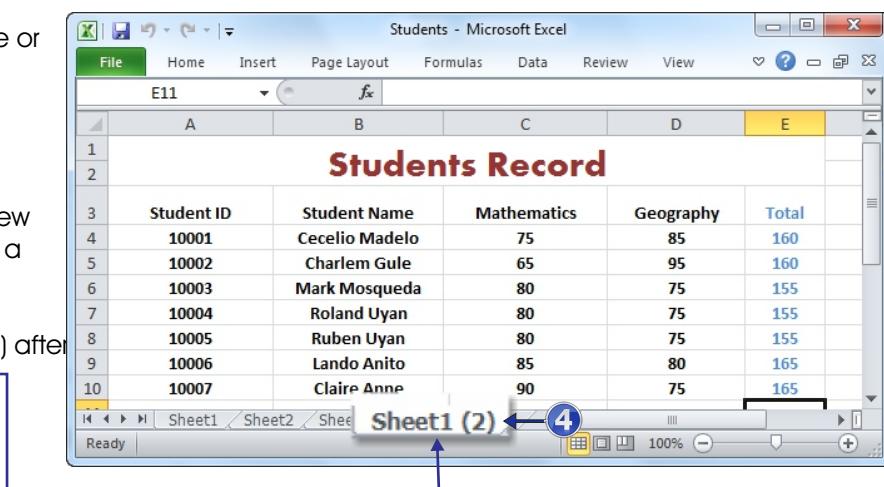
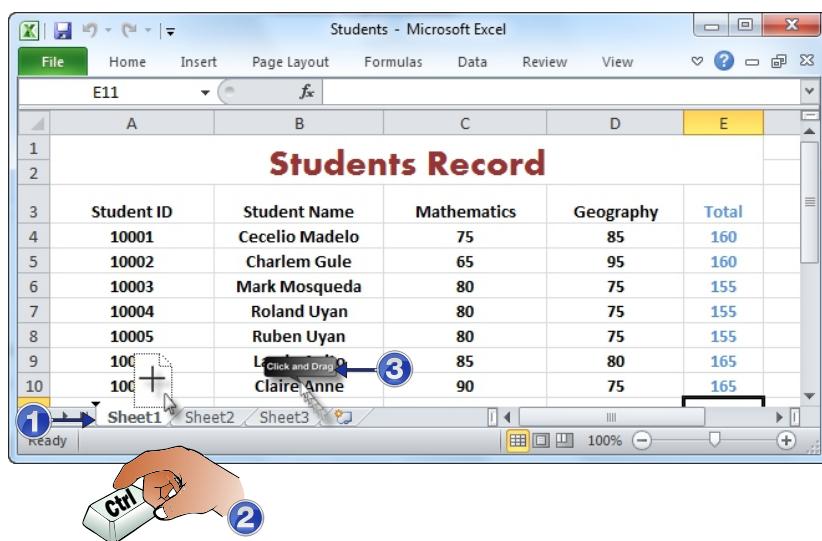
A small black triangle icon () keeps track of the sheet's location in the group while you drag.

- You can also right-click the sheet tab and click Move or Copy to move worksheets with the Move or Copy dialog box.

- 4 Release the mouse button.

Excel copies the worksheet as a new sheet in the workbook and gives it a default name.

Excel labels sheet copies with a (2) after the original sheet name.



## Moving and Copying Data

You can rearrange your worksheet data to improve the presentation of your worksheet information. You can use the Cut, Copy, and Paste commands to copy data within Excel, or move and share data between other Office programs. For example, you want to cut a row of labels and paste it into another worksheet, or copy a formula from one cell to another cell in the same worksheet. You can also drag and drop data to move and copy it within a worksheet.

The Copy command makes a duplicate of the selected data, and the Cut command removes the data from the original file entirely. Excel places data that you copy or cut in the Windows Clipboard until you are ready to paste it into place.

### Move Or Copy Data

- ① Select the data that you want to move or copy.
- ② Click Home tab.
- ③ Click Cut ( X) to move data, or click Copy ( C) to copy the data.

The data is placed in the Windows Clipboard.

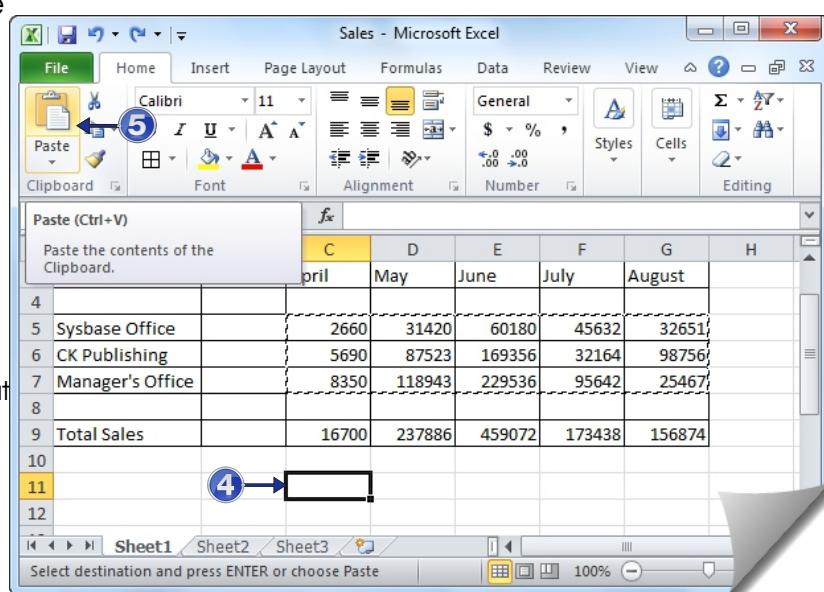
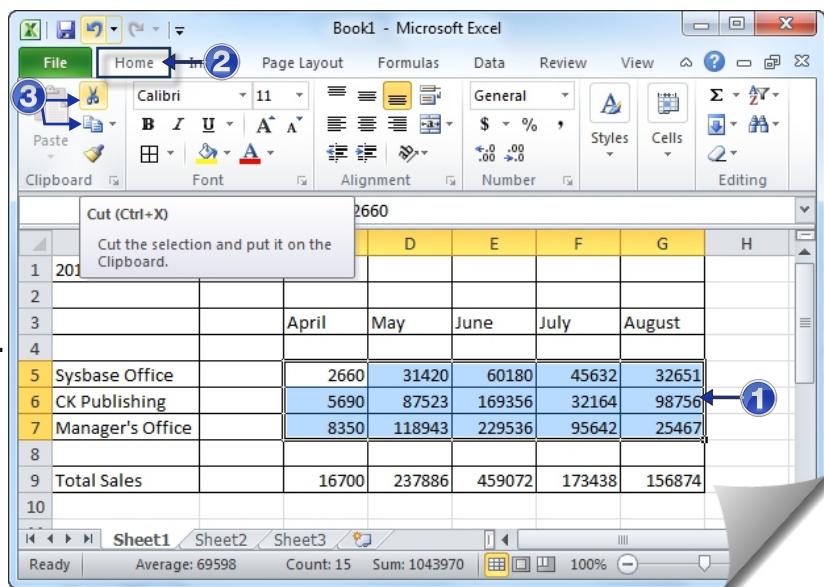
- Note: You can also use the Cut, Copy, and Paste commands to move and copy the entire rows or columns.

- ④ Click where you want to insert the data.
- You can also open another workbook or worksheet to paste the data.

- ⑤ Click Paste ( P).

The data appears in the new location.

- You can also click the arrow on the Paste button and specify what to paste from the drop-down menu that appears.
- A smart tag ( S) might appear when you paste the data. You can click the to view a list of options you can apply to the pasted data.



# Deleting Data or Cells

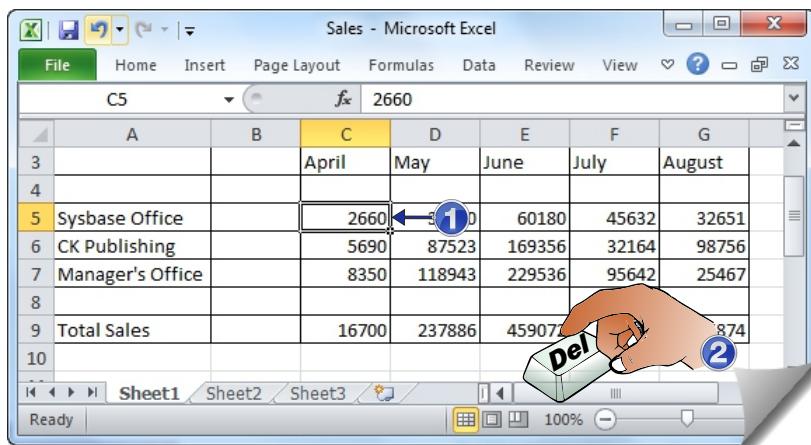
You can delete Excel data you no longer need. When you decide to delete data, you can choose whether you want to remove the data and keep the cell or delete the entire cell. When you delete a cell's contents, only the data are removed. When you delete a cell, Excel removes the cell as well as its contents. The existing cells in your worksheet shift over or up to fill any gap in the worksheet structure.

## Delete Data or Cells

### Delete Data

- ① Click the cell or select the cells containing the data that you want to remove.
- ② Press **Delete**.

Excel deletes the data from the cell or cells.



### Delete Cells

- ① Click the cell or select the cells that you want to remove.
- ② Right-click over the cell or range.
- ③ Click Delete.

The Delete dialog box opens.

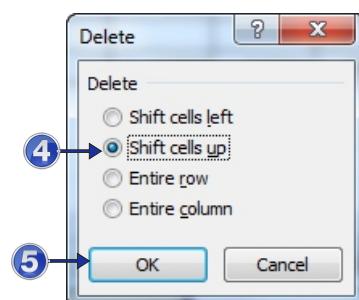
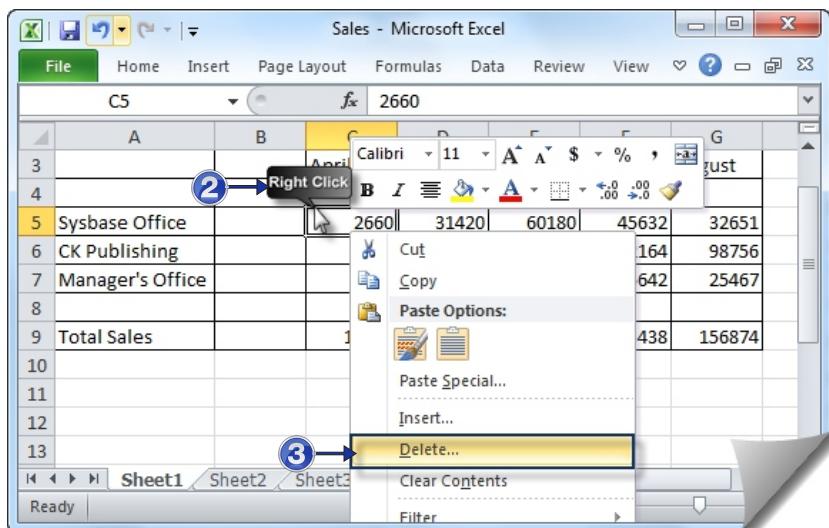
- You can also click Delete on the Home tab.
- ④ Click a deletion option (○ changes to ●).

- You can also open another file to copy the data before you delete it.

- ⑤ Click OK.

Excel removes the cells and their content from the worksheet.

Other cells shift over or up to fill the void of any cells you remove from a worksheet.



# Adding Columns and Rows

To add more data in a worksheet, you can add columns and rows. For example, you might need to add a column in the middle of several existing columns to add data that you left out the first time you created the workbook.

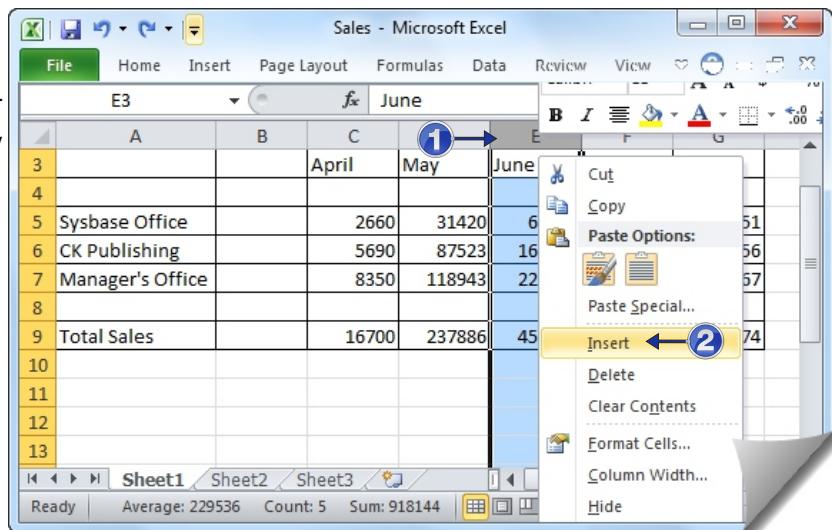
## Add Columns and Rows

### Add A Column

- ① Right-click the column to the right of where you want to insert a new column.
- ② Click Insert.

Excel adds a column.

- You can also click Insert on the Home tab to insert a cell, row, column, or worksheet from a drop-down menu.

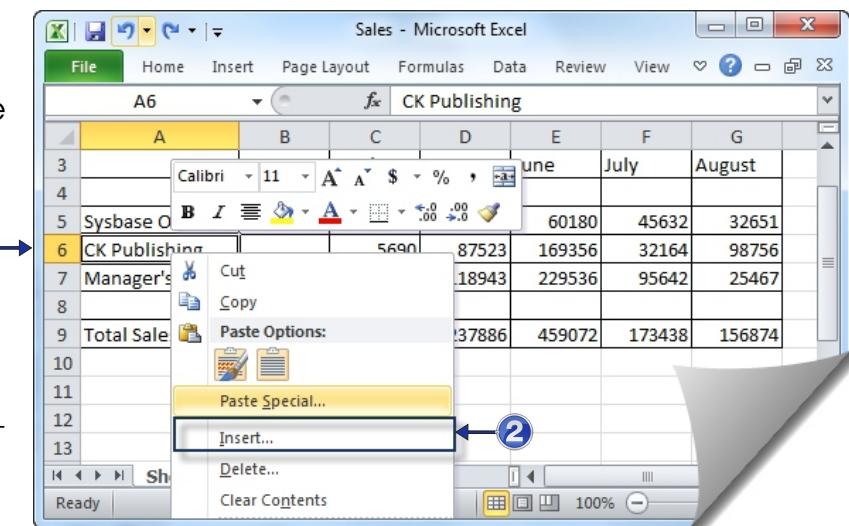


### Add A Row

- ① Right-click the row below where you want to insert a new row.
- ② Click Insert.

Excel adds a row.

- You can also click Insert on the Home tab to insert a cell, row, column, or worksheet from a drop-down menu.



# Deleting Columns and Rows

You can remove columns or rows you no longer need in the worksheet. For example, you want to remove a row of out-of-date data. When you delete an entire column or row, Excel deletes any existing data within the selected cells. Excel also moves the other columns and rows to fill the spaces left by the deletion.

## Delete Columns and Rows

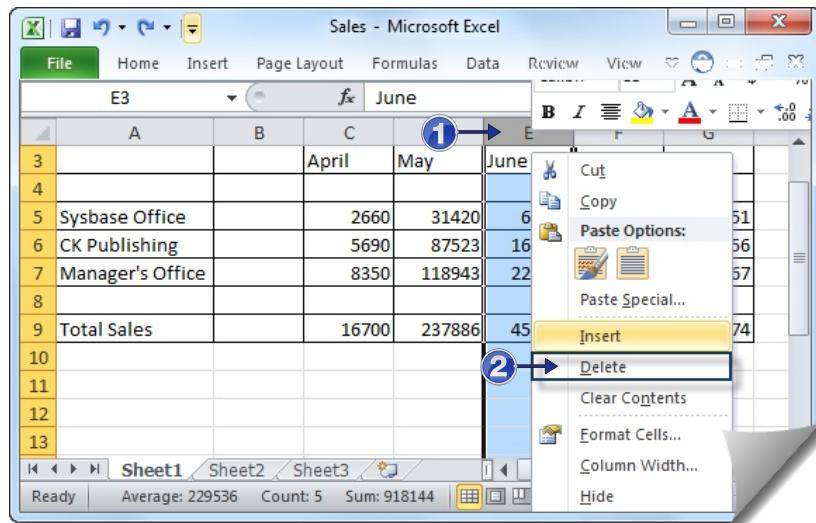
### Delete A Column

- ① Right-click the column that you want to delete.
- ② Click Delete.

Excel deletes the column.

*Note: If you press Delete, Excel deletes the column's contents instead of the entire column.*

- You can also click Delete on the Home tab to remove a column or row.



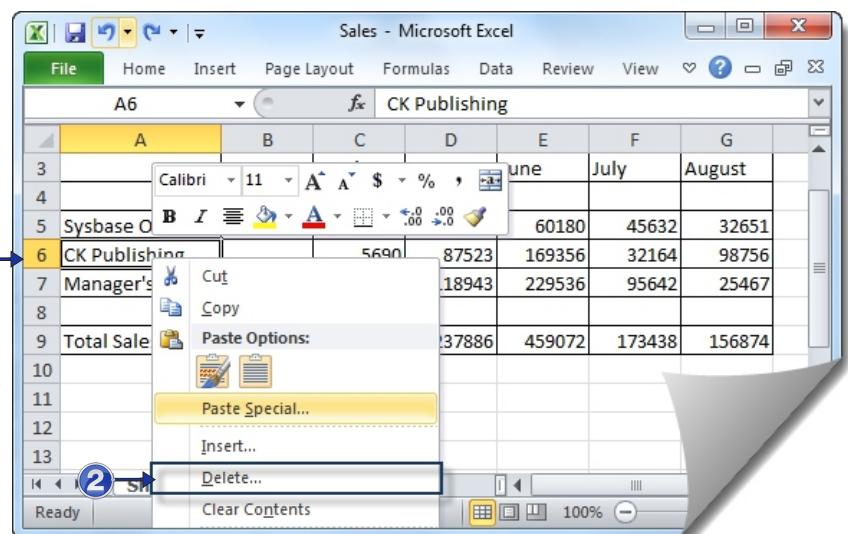
### Delete A Row

- ① Right-click the row that you want to delete.
- ② Click Delete.

Excel deletes the row.

*Note: If you press Delete, Excel deletes the row's contents instead of the entire row.*

- You can also click Delete on the Home tab to remove a row.

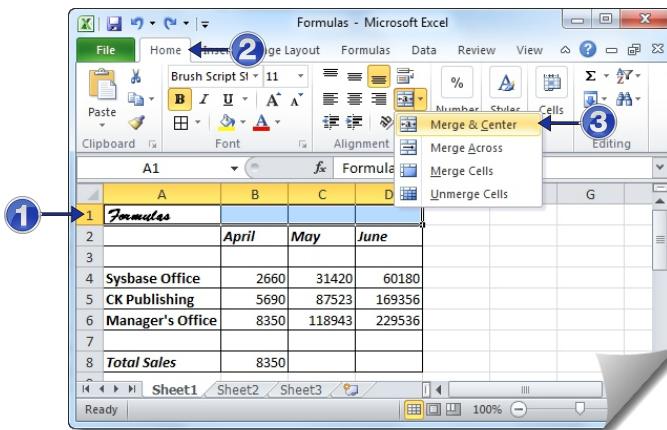


## Centering Data Across Columns

You can center a title or heading across a range of cells in your worksheet. For example, you want to include a title across multiple columns of labels. You can use the Merge and Center command to quickly create a merged cell to hold the title text.

### Center Data Across Columns

- ① Select the cell containing the text that you want to center and the cells to the right of it across which you want to center that text.
  - ② Click the Home tab.
  - ③ Click Merge and Center (A=).
- Excel merges the cells and centers the text.

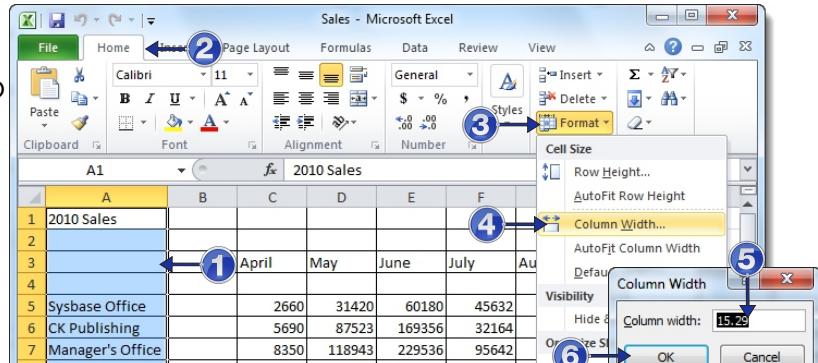


## Setting Column Width and Row Height

You can change the width of any column or the height of any row in a worksheet. By default, Excel starts all new worksheets with uniform column width and row height. You might need to widen a column to fit a line of text, or you might need to deepen a row to fit a graphic. Every time you open a new workbook, Excel defines a default column size of 8.43, measured in characters, and a default row height of 15.00, measured in points. You can set your own widths and heights as needed.

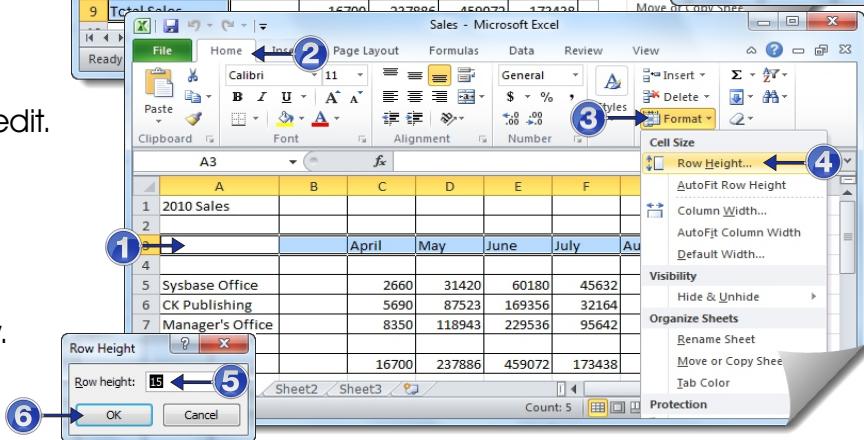
### Set A Column Width

- ① Click the column that you want to edit.
  - ② Click the Home tab.
  - ③ Click Format.
  - ④ Click Column Width.
- The Column Width dialog box opens.
- ⑤ Type a width value for the column.
  - ⑥ Click OK.
- Excel assigns the new column width.



### Set A Row Height

- ① Click the row that you want to edit.
  - ② Click the Home tab.
  - ③ Click Format.
  - ④ Click Row Height.
- The Row Height dialog box opens.
- ⑤ Type a height value for the row.
  - ⑥ Click OK.
- Excel assigns the new row height.



# Hiding Columns and Rows

Excel allows you to hide columns and rows in your worksheets to keep confidential information out of view. For example, you can hide a column or row to prevent the data from appearing on a print out.

## Hide Columns and Rows

### Hide A Column

- Click the column that you want to hide.

- You can also select multiple columns to hide.

- Click the Home tab.

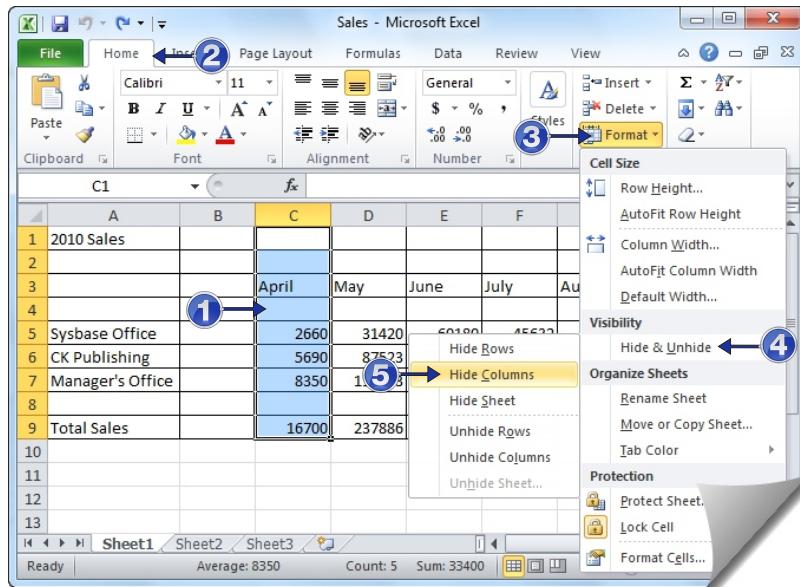
- Click Format.

- Click Hide & Unhide.

- Click Hide Columns.

Excel hides the column by shifting the other columns over.

- You can also hide an entire sheet in your workbook by clicking Format, Hide & Unhide, and then Hide Sheet.



### Hide A Row

- Click the row that you want to hide.

- You can also select multiple rows to hide.

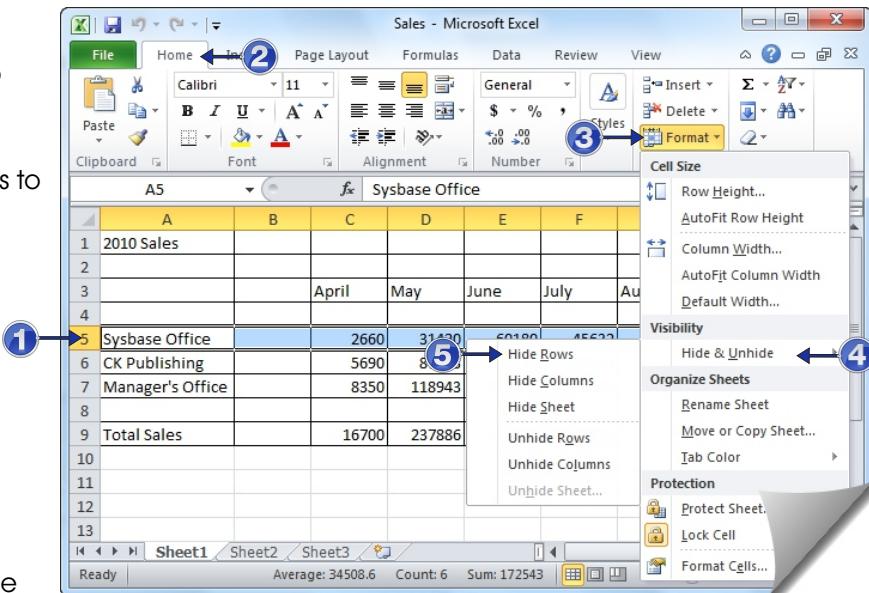
- Click the Home tab.

- Click Format.

- Click Hide & Unhide.

- Click Hide Rows.

Excel hides the row by shifting up the other rows.



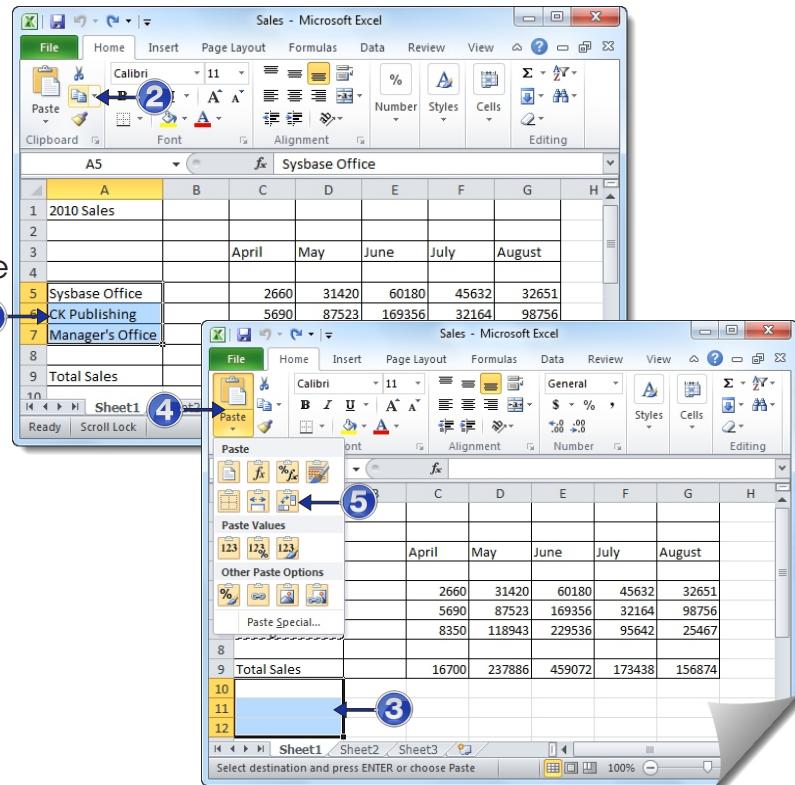
## Transposing Columns and Rows

You can quickly turn column labels into row labels or row labels into column labels using the Transpose command. For example, you may create a worksheet that includes three column labels and four row labels but later decide it is better the other way around. Rather than retype the text, you can activate the Transpose command.

### Transpose Columns and Rows

- 1 Select the cells containing the text that you want to transpose.
  - 2 Click the Copy icon (📋).
  - 3 Click where you want to insert the transposed text.
- Note: The new paste area must be outside the selected cells.
- 4 Click the Paste's pull-down arrow ▾.
  - 5 Click Transpose.

Excel pastes the text in the reverse order, with column labels becoming row labels and row labels becoming column labels.



## Freezing Columns and Rows

You can freeze a column or row to keep the labels in view as you scroll through a larger worksheets. The area that you freeze is non scrollable but the unfrozen areas are not.

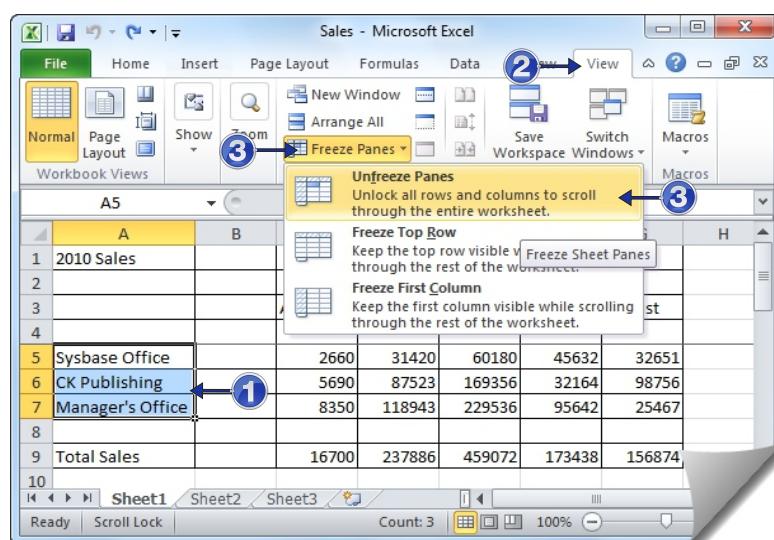
### Freeze Columns and Rows

- 1 Click to the right of the column or below the row that you want to freeze.
- 2 Click the View tab.
- 3 Click the Freeze Panes.

Excel freezes the area above or to the left of where you applied the Freeze Panes command.

The area below or to the right of the frozen pane is scrollable.

- If you want to freeze only the top row or the first column, use those commands in the Freeze Panes gallery.
- To unlock the columns and rows, click Freeze Panes on the View tab, and then click Unfreeze Panes.



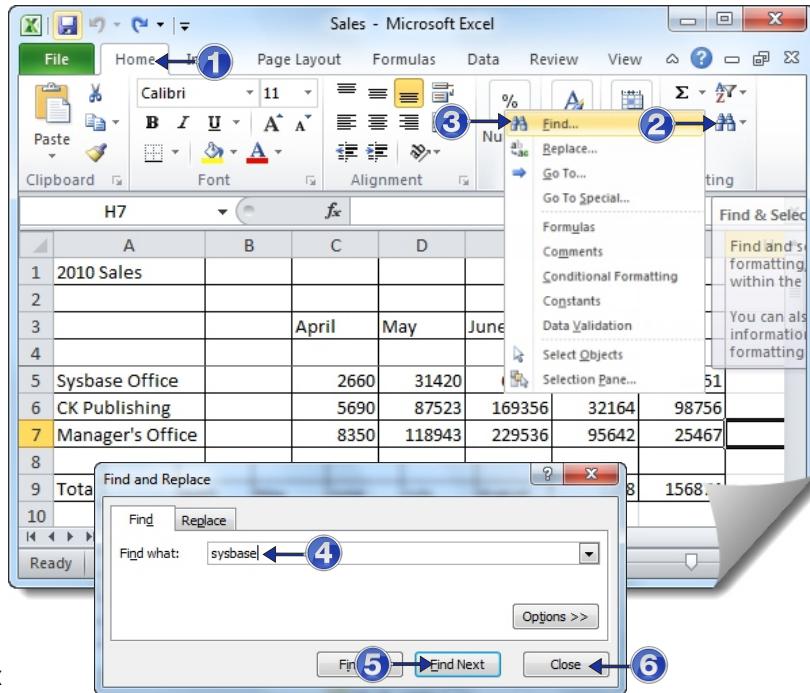
# Finding and Replacing Data

You can use Excel's Find tool to search through your worksheet for a particular number, formula, word, or phrase. You can use the Replace tool to replace instances of text or numbers with other data. For example, you may need to sort through a long worksheet, replacing a reference with another name.

## Find and Replace Data

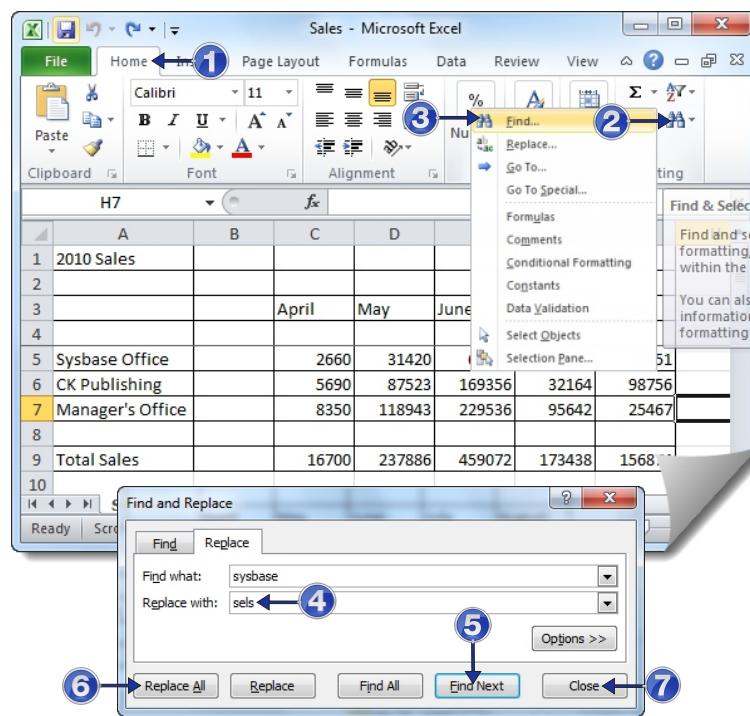
### Find Data

- 1 Click the Home tab.
  - 2 Click Find & Select.
  - 3 Click Find.
- The Find and Replace dialog box opens with the Find tab displayed.
- 4 Type the data that you want to find.
  - 5 Click Find Next.
- Excel searches the worksheet and finds the first occurrence of the specified data.
- You can click Find Next again to search for the next occurrence.
- 6 When finished, click Close to close the dialog box.
- Note: Excel might display a prompt box when the last occurrence is found. Then Click OK.



### Replace Data

- 1 Click the Home tab.
  - 2 Click Find & Select.
  - 3 Click Replace.
- The Find and Replace dialog box opens with the Replace tab displayed.
- 4 Type the data that you want to find, as well as the replacement data.
  - 5 Click Find Next.
- Excel locates the first occurrence of the data.
- 6 Click Replace to replace the occurrence.
  - You can click Replace All to replace every occurrence in the worksheet.
- 7 When finished, click the Close button.
- Note: Excel might display a prompt box when the last occurrence is found. Then Click OK.



# 3

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## Laboratory



SpreadSheet  
VISUALLESSONGUIDE

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## Manual

# LABORATORY MANUAL

## Lesson 2 Working with Worksheets and Worksheets Data

Microsoft Excel is a spreadsheet tool capable of performing calculations, analyzing data and integrating information from different programs. Microsoft Excel is comprised of organizational units called workbooks. A standard workbook contains worksheets and chart sheets. Worksheets perform calculations, store and organize data, present graphics and controls like a web page; they are extremely versatile. A worksheet in turn is comprised of millions of cells.

### Objectives

After completing this Laboratory, you should be able to:

- manipulate Microsoft Excel through Transposing columns and rows;
- manipulate Microsoft Excel applying the freezing method; and
- demonstrate the process of copying, moving and deleting data in a worksheet.

### Lab 2.1 Worksheets Work

*Estimated Completion time: 5 - 10 Minutes*

Directions:

1. Launch **Microsoft Excel**.
2. Search the land area and the population as of 2014 of the countries in the Preview.
3. Type in the countries and the data that you have researched about them.
4. Point out the following:
  - a. Active Cell
  - b. Active Worksheet
  - c. Worksheet Navigation Buttons
  - d. View Buttons
  - e. Horizontal Scroll Bar
  - f. Vertical Scroll Bar
5. Save the exercise as **Asian Countries Data** and place it to your own folder.

### Preview:



A screenshot of Microsoft Excel showing a table titled "Asia's List of Countries". The table has three columns: "Country", "Land Area", and "Population". The data includes Israel, Philippines, China, Iraq, Iran, Japan, South Korea, Thailand, Indonesia, and Malaysia. The table is styled with red and black text, and the header row is bolded. The Excel ribbon is visible at the top, and the formula bar shows "C15". The status bar at the bottom right indicates "Ready" and "100%".

Country	Land Area	Population
Israel		
Philippines		
China		
Iraq		
Iran		
Japan		
South Korea		
Thailand		
Indonesia		
Malaysia		

## Lab 2.2 Sheets Feast

*Estimated Completion time: 10 - 15 Minutes*

Directions:

1. Launch Microsoft Excel.
2. Open the Naming Worksheets.
3. Follow the steps on how to name a worksheet, add a worksheet, delete a worksheet and move a worksheet.
4. Specifically, do the following:
  - a. Name the five sheets according to their year level.
  - b. Add a worksheet.
  - c. Move the worksheet that you have added to the center of the second and third sheet.
  - d. Delete the sheet that you have inserted or moved.
5. Save the worksheet and place it to your own folder.

**Score**



Preview:

	A	B	C	D	E
1					
2					
3					
4	Names	1st Grading	2nd Grading	3rd Grading	4th Grading Total
5	Diango Bustamante	97.50%	96%	97%	96.30% 96.7
6	Rechard Sumobay	95%	94.30%	95.20%	94.50% 94.7
7	Juliet Wabe	93%	92.90%	93.40%	93.80% 93.2
8	Norres Sison	93%	92%	92.60%	93.70% 92.8
9	George Magallano	91%	90.80%	91.40%	90.90% 91.0
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

## Lab 2.3 Copy Cut

*Estimated Completion time: 10 - 15 Minutes*

Directions:

1. Launch Microsoft Excel.
2. Follow the steps on how to move and copy data, delete data or cells, add columns and rows and delete columns and rows.
3. Do the following:
  - a. Copy the "Ice Cream Remittance" data and paste them in cell A14.
  - b. From the new table that you have copied, delete the data of "Answers of Any Function Used" and "Total Day Remittance".
  - c. Delete all the cells in "Tuesday" remittance row.
  - d. Add a column in column A.
  - e. Add a row in "Tuesday" row.
  - f. Delete the column and row that you have just inserted.

**Score**



Preview:

	A	B	C	D	E	F	G	H	I	J
1										
2										
3	Week 3									
4	Days	Alvin	Jonas	Tiborcio	Bador	Peter	Total Day			
5	Monday	765	563	789	478	478				
6	Tuesday	562	856	758	256	846				
7	Wednesday	456	941	845	475	851				
8	Thursday	756	621	658	685	589				
9	Friday	846	589	951	478	658				
10	Saturday	874	946	863	568	957				
11	Total Remittance:									

4. Save the worksheet as **Move to Delete** and place it to your own folder.

**Lab 2.4 Centered Transposed***Estimated Completion time: 10 - 15 Minutes*

Directions:

1. Launch **Microsoft Excel**.
2. Open the **Centering to Transposing** worksheet.
3. Follow the steps on how to center data across columns, set column width and row height, hide columns and rows and transpose columns and rows.
4. Do the following:
  - a. Merge and center the word "Ice Cream Remittance" up to column G. Do also the same to "Toby's Ice Cream Parlor".
  - b. Set the column width to 20 and the row height to 19.
  - c. Hide and unhide row and column.
  - d. Transpose the words in cell A11 and A15.
5. Save the worksheet as **Centering to Transposing** and place it to your own folder.

**Lab 2.5 Cool Freeze***Estimated Completion time: 5 - 10 Minutes*

Directions:

1. Launch **Microsoft Excel**.
2. Open the **Centering to Transposing** worksheet.
3. Follow the steps on how to freeze columns and rows, and find and replace data.
4. Do the following:
  - a. Perform all the options on how to freeze columns and rows. Start freezing sheets from cell G12 to visualize the whole data while scrolling through the rest of the worksheet.
  - b. Find the word **Toby's Ice Cream** and replace it with your name.
5. Save the worksheet as **Cool Freeze** and place it to your own folder.

**Score****Preview:**

**Centering to Transposing1 - Microsoft Excel**

	A	B	C	D	E	F	G	H	I	J	K	L	M	
1														
2														
3														
4	Days	Alvin	Jonas	Tiborcio	Bador	Peter	Total Day							
5	Monday	765	563	789	478	478								
6	Tuesday	562	856	758	256	846								
7	Wednesday	456	941	845	475	851								
8	Thursday	756	621	658	685	589								
9	Friday	846	589	951	478	658								
10	Saturday	874	946	863	568	957								
11	Answers of any Function used:													
12	grade and summary													
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