

KOFORIDUA TECHNICAL UNIVERSITY

Computer Literacy II



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UNIT 1

SPREADSHEET-EXCEL

UNIT GOALS

After completing this course you will be able to:

- Get a handle on the new look of Excel.
- Understand what spreadsheets applications are
- Launch Microsoft Excel and also know the versions available
- Know the parts of the Microsoft Excel Window
- Navigate in Microsoft Excel
- Find everyday commands on the Ribbon: Cut, Copy, Paste, Insert Sheet Rows, Insert Sheet Columns, and Sum.
- Save workbooks in the new Excel file formats.
- Identify

SESSION 1: INTRODUCTION, LAUNCHING AND VERSIONS OF MICROSOFT EXCEL

INTRODUCTION

This handout introduces students to MS Excel and PowerPoint 2013. This guide will show you how to use the powerful tools in Excel 2013 and PowerPoint 2013 for organizing, visualizing, and calculating your data and also presentation. To make the best out of this guide, students are encouraged to sit in front of a computer that has Microsoft Excel and PowerPoint 2013 and practice all the time.

WHAT IS A SPREADSHEET?

A spreadsheet is a computer program that presents data, such as numbers and text, in a grid of rows and columns. This grid is referred to as a **worksheet**. Examples of spreadsheet application are; super calc, visi calc, lotus 123, Microsoft Excel and Quattro pro. Microsoft Excel is one of the most commonly used spreadsheet software.

What is Ms Excel: MS-Excel may be defined as an electronic spreadsheet or workbook program that can perform calculations on numeric data. It is capable of handling spreadsheets, graphics and databases.

Typical uses of electronic spreadsheet are budgeting and planning in business and personal situation, the preparation of profit forecasts, account preparations, cash flow forecast and preparations of examination results in tertiary institutions and performing sensitivity analysis.

ADVANTAGES OF USING SPREADSHEET

- It enables detailed calculations to be made quickly and accurately.
- It enables calculations and several alternative sets of numbers to be made and to compare results. That is, it has sensitively analysis capability, which is also referred to as what if analysis. It is the

process of evaluating the effects of changing one or more value in formulas to help in the decision making and planning.

• It enables recalculations to be effected quickly, accurately, easily and automatically.

STARTING/LAUNCHING MICROSOFT EXCEL

To launch or start Ms Excel, follow the steps below;

- 1. Click on the start button on the taskbar
- 2. Click on all programs from the menu that appears
- 3. Click on Microsoft office then finally
- 4. Select Microsoft excel 2013

VERSIONS OF MICROSOFT EXCEL

- Excel 6.0
- Excel 95
- Excel 97
- Excel 2000
- Excel 2003
- Excel 2007
- Excel 2010
- Excel 2013

The current version of Microsoft Excel is 2016



Start Screen/Backstage view

When you start Excel 2013, the program displays the default startup screen called **Backstage view** as displayed in the following image below.



Backstage view

The backstage view screen has 2 sections, left and right panels.

Left Panel

Here, you will find a list of recently opened files (clicking on any of them will open as existing file that was recently opened) and the **Open Other workbooks** button, which is located at the bottom of the panel (clicking on this button will display a dialogue box which allows a user to open a file already created and saved at different locations).

Right Panel

The Right panel shows a list of default templates that are available in Excel. If none of them meets your expectations, you can use the search bar, by typing the phrase that matches the description of a template you are looking for. In this case, Excel will be searching for templates that are available on the Internet. You will also find a blank workbook option. This icon, when clicked on, presents a blank workbook where a user can create an



Excel document from scratch. An example of a blank workbook is displayed.

The Excel 2013 environment

If you have previously used Excel 2010 or 2007, Excel 2013 will feel familiar. It continues to use features like the **Ribbon** and **Quick Access toolbar**, etc. where you will find commands to perform common tasks in Excel. After Excel is launched, click the **FILE** tab. After you do this the backstage view will appear as below



On the left side, you will find a green area with menu items. If you click one of them, options that are related to the selected category will appear on the right side of the screen.

Info

Here, you will find a variety of information about the file and a list of backup files of the currently opened document.

New

In this category, you can create a new file. It can be a blank sheet or one of the

many available templates.

Open

This category contains a list of recently opened workbooks. Additionally, you can load a file from a disk or cloud services.

Save / Save As

This allows a user to save a workbook at various locations like my documents, desktop, usb flash drive, external hard disk drive, cloud storage, etc. Similarly, you were taught how to save documents in Microsoft Word, saving in Excel is same but with a different file extension (.xlsx).

Note: A file extension (sometimes referred to as *file suffix* or a *filename extension*) is the character or group of characters after the period (.) that make up an entire file name.

The file extension helps an operating system, like Windows, determine which program on your computer the file is associated with. For example, the file **akonobone.xlsx** ends in **.xlsx**, a file extension that might be associated with Microsoft Excel on your computer.

When you attempt to open this file, Windows sees that the file ends in a <u>XLSX</u> extension, which it already knows should be opened with the Microsoft Excel program.

Print

Under this button, there are options that will let you adjust the document parameters. You can set: margins, scaling, orientation, the number of copies or choose one of the available printers. On the right side you will find a preview of the currently edited spreadsheet, so you can know exactly how it will look like after you print it on paper.

Share

Under this tab, you can share your documents with other users. For instance, similar to sharing pictures on WhatsApp and/or Facebook, files created in Excel can also be shared to other users through an email, Facebook, etc.

Export

This option allows a user to convert the Excel file created to other file formats. For instance, exporting an Excel file into a portable digital file (.pdf) or saving it into previous version of MS Excel (97-2003 - .xls)

Account

Choose this button if you want to log into Excel.

Options

Click on this position and a new window with many different options will appear. Here, you can customize a lot of Excel features.

PARTS OF EXCEL WINDOW



The Quick Access Toolbar

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Next to the Microsoft Office button is the Quick Access toolbar. The Quick Access toolbar gives you with access to commands you frequently use. By

default, Save, Undo, and Redo appear on the Quick Access toolbar. You can use Save to save your file, Undo to roll back an action you have taken, and Redo to reapply an action you have rolled back.

The Title Bar

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Book1 - Microsoft Excel

The title bar is located at the top of the screen. On the Title bar, Microsoft Excel display the name of the workbook you are currently using and the name of the program. At the top of your screen, you should see "Microsoft Excel – book1" or a similar name.

Toolbars and Tabs

The new Microsoft Excel uses one main toolbar to allow you to modify your worksheet. Within this toolbar, you can switch between tabs to determine what you would like to do. You'll notice that this new version also comprises of some common commands and tools as in earlier versions.

The Main Toolbar contains all the options available to you in Microsoft Excel. The file tab allows you to Info, New, Save, Save As, Open, Close, Export, Account, Option and Share. In addition, you can also click on this File to save these documents to the internet. The file tab also provides an option to print and preview you documents using the Print command.

Worksheets

Microsoft excel consists of worksheets. Each worksheet contains columns and rows. The columns are labeled A to IV (2003 version); the rows are numbered 1 to 65,536. The 2007 version's columns are labeled from A to XFD and the rows from 1 through to 1,048,576. In Excel 2013 a worksheet can contain up to 1 048 576 rows and 16 384 columns, which gives 17 billion cells. The combination of the column and the row coordinate make up a cell address. For example, the cell located in the upper left corner of the workbook A1, meaning column A, row 1. Cell E10 is located at the under column E on row 10. You enter your data into the cells on the workbook.



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The Formula Bar	$\boldsymbol{\times}$	\checkmark	f_x	~
The Formula Dar				

It's located below the ribbon. In the formula bar, you can find the content of the currently selected cell. You can also enter and edit data inside the formula bar. Cell entries display on the right side of the Formula bar. If you do not see the Formula bar in your window, perform the following steps:

- 1. Choose the View tab.
- 2. Click Formula Bar in the Show/Hide group. The Formula bar appears.

The Status Bar



The Status bar appears at the very bottom of the Excel window and provides such information as the sum, average, minimum, and maximum value of selected numbers. You can change what displays on the Status bar by right-clicking on the Status bar and selecting the options you want from the Customize Status Bar menu. You click a menu item

to select it. You click it again to deselect it. A check mark next to an item means the item is selected.

Notice the "Ready" on the status bar at the lower left side of the screen. It tells you that Excel is in the ready mode and awaiting your next command. Other modes are the "Enter" and the "Edit". Other indicators appear on the status bar in the lower right corner of the screen.

Worksheet Views



Excel 2013 has a variety of viewing options that change how your workbook is displayed. You can choose to view any workbook in **Normal view**, **Page Layout view**, or **Page Break view**. These views can be useful for various tasks, especially if you're planning to **print** the spreadsheet.

To change worksheet views, locate and select the desired worksheet view command in the bottom-right corner of the Excel window.

The Name Box

You can also use the Name box to go to a specific cell. Just type the cell you want to go to in the Name box and then press Enter.

- 1. Type **B10** in the Name box.
- 2. Press Enter. Excel moves to cell B10

NAVIGATING THE EXCEL WORKSHEET

The session 1 of this unit treated *introduction to excel*, where you were

introduced to the excel worksheet, workbook, parts of the excel window, backstage view, etc. This session, will concentrate on how you will navigate properly in Ms Excel. In Ms Excel, you can navigate using the arrow keys, tab keys, the mouse, etc.

The Arrow keys:

The Up and Down Arrow Key

You can use the up/down arrow to move upward/downward one cell at a time.

• Press the down/up arrow keys and observe how the cursor moves downward/upward one cell at a time.

The Left and Right Arrow Key

You can use the left/right arrow to move left/right one cell at a time

• Press the right/left arrow keys and observe how the cursor moves right/left one cell at a time.

The Tab Key

Pressing the tab key moves the cursor to the right one cell at a time



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The Shift +Tab Key

Holding down the Shift key and pressing the Tab key at the same time, moves the cursor to the left one cell at a time

Page Up and Page Down

The page up and page down moves the cursor up and down one page at a time.

- 1. Press the page down key. Note that the cursor moves down one page.
- 2. Press the page up key. Note that the cursor moves up one page.

The Status Bar

The end mode, used in conjunction with the arrow keys, causes the cursor to move to the far end of the spreadsheet in the direction of the arrow.

- Press the END key. Note that "END MODE" appears on the status bar in the lower left corner of the screen.
- Press the right arrow key. Note that the cursor moves to the farthest right area of the screen.
- Press the END key again.
- Press the down arrow key. Note that the cursor moves to the bottom of the screen.
- Press the End key again.
- Press the left arrow key. Note that the cursor moves to the farthest left area of the screen.
- Press the End key again.
- Press the up arrow key. Note that the cursor moves to the top of the screen.

The Home Key

The home key, used in conjunction with the ctrl key, moves you to cell A1 – or to the beginning of the data area if you have entered data.

Scroll Lock + Cursors - screen moves one step in the selected direction. At the same time, the position of the active cell doesn't change. Note: the scroll lock is obsolete in its original purpose and many lap top keyboards are phasing it out to conserve space. You might have to use an on-screen keyboard to see it.

NAVIGATING THROUGH WORKSHEETS USING SHORTCUT KEYS

The following are shortcuts for moving quickly from one cell to a cell in a different part of the worksheet.

Insert	Home	Page Up
Delete	End	Page Down

1. Navigate Worksheets	9
Arrow Keys	Move one cell up, down, left, or right in a worksheet
Page Down/Page Up	Move one screen down / one screen up in a worksheet
(Alt)+(Page Down)/(Alt)+(Page Up)	Move one screen to the right / to the left in a worksheet
Tab)(Shift)+Tab	Move one cell to the right / to the left in a worksheet
Ctrl)+Arrow Keys	Move to the edge of next data region (cells that contains data)
Home	Move to the beginning of a row in a worksheet
Ctrl)+Home	Move to the beginning of a worksheet
Ctrl + End	Move to the last cell with content on a worksheet
Ctrl+F	Display the Find and Replace dialog box (with Find selected)
Ctrl+H	Display the Find and Replace dialog box (with Replace selected)
Shift+F4	Repeat last find
Ctrl+G (or F5)	Display the 'Go To' dialog box
Ctrl)+(Arrow Left)/(Ctrl)+(Arrow Right)	Inside a cell: Move one word to the left / to the right
Home (End	Inside a cell: Move to the beginning / to the end of a cell entry
Alt + Arrow Down	Display the AutoComplete list eg in cell with dropdowns or autofilter
End	Turn 'End' mode on In End mode, press arrow keys to move to the next nonblank cell in the same column or row as the active cell From here use arrow keys to move by blocks of data, home to move to last cell, or enter to move to the last cell to the right

5. Edit Content of Cells		-
F2	Edit the active cell with cursor at end of the line	
(Alt)+(Enter)	Start a new line in the same cell	
Enter	Complete a cell entry and move down in the selection With multiple cells selected: fill cell range with current cell	
Shift)+Enter	Complete a cell entry and move up in the selection	
Tab/Shift+Tab	Complete a cell entry and move to the right / to the left in the selection	
Esc	Cancel a cell entry	
Backspace	Delete the character to the left of the insertion point, or delete the selection	
Delete	Delete the character to the right of the insertion point, or delete the selection	
Ctrl + Delete	Delete text to the end of the line	
Ctrl +; (semicolon)	Insert current date	
Ctrl + Shift + :: (colon)	Insert current time	
Ctrl + ·	Duplicate value from Cell above into current Cell	
6. Excel Basics		-
Shift)+(F10)	Display the shortcut menu for the selected command (simulates right mouse button)	
Ctrl+Z	Undo last action (multiple levels)	
Ctrl+V	Redo last action (multiple levels)	
Ctrl+C	Copy contents of selected cells	
Ctrl+X	Cut contents of selected cells	
Ctrl+V	Paste content from clipboard into selected cell	
Ctrl +Alt +v	If data exists in clipboard: Display the Paste Special dialog box	

9. Formulas	Ξ
=	Start a formula
Alt)+=	Insert the AutoSum formula
Shift +F3	Display the Insert Function dialog box
Ctrl)+(A)	Display Formula Window after typing formula name
Ctrl + Shift + A	Insert Arguments in formula after typing formula name
Shift)+F3	Insert a function into a formula
Ctrl)+(Shift)+(Enter)	Enter a formula as an array formula
F4	After typing cell reference (eg =E4) makes reference absolute (=\$E\$4). Repeat if you want to toogle from absolute reference to parcial or complete removal (\$E\$4 -> E\$4 -> \$E4 -> returning to E4.

UNIT 2

MICROSOFT EXCEL CONTINUED

UNIT GOALS

After completing this course you will be able to:

- Understand what cell is in Microsoft Excel
- Work with Columns and rows in Microsoft Excel
- Understand editing function in Microsoft Excel like Cut, Copy, Paste, Find, Go to, etc.
- Create a new workbook.
- Enter text and numbers.
- Edit text and numbers.
- Insert and delete columns and rows.

SESSION 1: CELLS, ROWS AND COLUMNS

This session explores the functions of cells, rows and columns, how they are related and manipulated in the Microsoft excel environment.

WORKING WITH CELLS

Cells are an important part of any project, file, or document being used in Microsoft excel. A cell is an area defined the intersection of a row and a column. It holds/stores all of the data being used to create the worksheet. Each cell has a unique address that consists of its column label and row number.

Active Cell/Current Cell

Active Cell is also referred to as current cell. There are many cells in a worksheet. However, only one of the numerous cells is regarded as the active cell at any point in time. The active cell is the cell which contains the cell pointer and indicates that the next entry affects this cell.

The Cell Pointer

The cell pointer is also referred to as the cell selector. It is a rectangular highlight that appears on one cell in the work sheet and identifies the current cell. The cell pointer can be moved to any cell in the worksheet by using the arrow keys also called directional keys.

Gridlines

They are lines on the worksheet that separate one cell from another. The gridlines can be printed or suppressed on output.

Range

The range is a set of contiguous cells that forms a rectangle. A range can be a cell, a row, a column or several rows and columns. A range may appear in a formula or in function. Example A1 to Z1.

CELL ADDRESSING

In Microsoft excel you'll find that each cell has a unique name or address. The name of a cell is usually found in the namebox. Example cell A1, d29 or W100. Microsoft Excel records cell addresses in formulas in three different ways, called absolute, relative, and mixed reference.

A cell reference refers to a cell or a range of cells on a worksheet and can be used in a formula so that Microsoft Office Excel can find the values or data that you want that formula to calculate.

In one or several formulas, you can use a cell reference to refer to:

- Data from one or more contiguous cells on the worksheet.
- Data contained in different areas of a worksheet.
- Data on other worksheets in the same workbook

Relative Cell Addressing

Relative cell addressing, when you copy a formula from one area of the worksheet to another, Excel records the position of the cell relative to the cell that originally contained the formula. With absolute cell addressing, when you copy a formula from one area of the worksheet to another, Excel references the same cells, no matter where you copy the formula.

Absolute Cell Addressing

Absolute cell addressing always points to the same place, even if you change the position of any of those cells. You make a cell address an absolute cell address by placing a dollar sign in front of the row and column identifiers. You can do this automatically by using the F4 key. To illustrate:

- 1. Move to cell C12.
- 2. Type =.
- 3. Click cell C9.
- 4. Press F4. Dollar signs appear before the C and the 9.

- 5. Type +.
- 6. Click cell C10.
- 7. Press F4. Dollar signs appear before the C and the 10.
- 8. Type +.
- 9. Click cell C11.
- 10. Press F4. Dollar signs appear before the C and the 11.
- 11. Click the check mark on the formula bar. Excel records the formula in cell C12.

Copy and Paste with Keyboard Shortcuts

	C12	- (f_x	=\$C\$9+\$	C\$10+\$C\$:	11
	Α	В	С	D	E	F
9	1	2	1	2		
10	1	2	1	2		
11	1	2	1	2		
12	3	6	3			
13						
14						

Keyboard shortcuts are key combinations that enable you to perform tasks by using the keyboard. Generally, you press and hold down a key while pressing a letter. For example, **Ctrl+C** means you should press and hold down the Ctrl key while pressing "C."

Now copy the formula from C12 to D12. This time, copy by using keyboard shortcuts.

- 1. Move to cell C12.
- 2. Hold down the Ctrl key while you press "C" (Ctrl+C). Excel copies the contents of cell C12.
- 3. Press the right arrow once. Excel moves to D12.
- 4. Hold down the Ctrl key while you press "v" (Ctrl+V). Excel pastes the contents of cell C12 into cell D12.
- 5. Press Esc to exit the Copy mode.

Compare the formula in cell C12 with the formula in cell D12 (while in the respective cell, look at the Formula bar). The formulas are exactly the same. Excel copied the formula from cell C12 to cell D12. Excel copied the formula in an absolute fashion. Both formulas sum column C.

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10	1	2	1	2		
11	1	2	1	2		
12	3	6	3	3		
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Mixed Cell Addressing

A mixed Cell Addressing is an addressing that refer to a specific row or column. You use mixed cell addressing to reference a cell when you want to copy part of it absolute and part relative. For

example, the row can be absolute and the column relative. You can use the F4 key to create a mixed cell reference. You can use mixed cell addressing to keep the row constant while the column changes, or vice versa. The following exercises demonstrate.

- 1. Move to cell E1.
- 2. Type =.
- 3. Press the up arrow key once.
- 4. Press F4.
- 5. Press F4 again. Note that the column is relative and the row is absolute.
- 6. Press F4 again. Note that the column is absolute and the row is relative.
- 7. Press Esc.

If you wish to perform a function on a group of cells, you must first select those cells by highlighting them. The exercises that follow teach you how to select.

Selecting a range of cells

To select cells A1 to E1:

- 1. Go to cell A1.
- 2. Press the F8 key. This anchors the cursor.
- 3. Note that "Extend Selection" appears on the Status bar in the lower-left corner of the window. You are in the Extend mode.
- 4. Click in cell E7. Excel highlights cells A1 to E7.
- 5. Press Esc and click anywhere on the worksheet to clear the highlighting.

Alternative Method: Select Cells by Dragging



You can also select an area by holding down the left mouse button and dragging the mouse over the area. In addition, you can select noncontiguous areas of the worksheet by doing the following:

- 1. Go to cell A1.
- Hold down the Ctrl key. You won't release it until step 9. Holding down the Ctrl key enables you to select noncontiguous areas of the worksheet.
- 3. Press the left mouse button.

- 4. While holding down the left mouse button, use the mouse to move from cell A1 to C5.
- 5. Continue to hold down the Ctrl key, but release the left mouse button.
- 6. Using the mouse, place the cursor in cell D7.
- 7. Press the left mouse button.
- 8. While holding down the left mouse button, move to cell F10. Release the left mouse button.
- 9. Release the Ctrl key. Cells A1 to C5 and cells D7 to F10 are selected.
- 10. Press Esc and click anywhere on the worksheet to remove the highlighting.

Data Types

When you create a new file, all of the cells in the worksheet are of a general type. This means that when you enter a new value, Excel tries to guess whether you wanted to enter text, a numerical value, a date, etc.

Text

The text is the only data type in Excel that is, by default, aligned to the left. It is used mainly for naming table headers, descriptions, etc.

Numbers

This type of data includes integers, fractions, percentages, currency, and other types of figures. These are the most common data types in most worksheets.

Dates and Times

This type includes the date and time, stored in different formats. For example, the date with time: **2015-07-07 12:32:56** can also be saved as **2015-07-07** or **July 7**, **2015**.

Logical Values

This data type can contain one of the two values: **TRUE** or **FALSE.** In the vast majority of cases, you won't use this data type. It is useful when you work with the macro code. This value is, by default, centered.

Entering Data

In this section, you will learn how to enter data into your worksheet. First, place the cursor in the cell in which you want to start entering data. Type some data, and then press Enter. If you need to delete, press the Backspace key to delete one character at a time.



- 1. Place the cursor in cell A1.
- Type John Jordan. Do not press Enter at this time.



1 5 Page 11 Calibri 0 B I <u>U</u> - A **E** A Paste 律 3 - A . A2 4 В A John 1 2 3

The Backspace key erases one character at a time.

- 1. Press the Backspace key until Jordan is erased.
- 2. Press Enter. The name "John" appears in cell A1.

Editing the content of a Cell

After you enter data into a cell, you can edit the data by pressing F2 while you are in the cell you wish to edit.



Change "John" to "Jones."

- 1. Move to cell A1.
- 2. Press F2.
- 3. Use the Backspace key to delete the "n" and the "h."
- 4. Type **nes**.
- 5. Press Enter.

Alternate Method: Editing a Cell by using the Formula Bar

You can also edit the cell by using the formula bar. You change "jones" to "joker" in the following exercise.

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- 4. Type **ker**.
- 5. Press Enter.

- 1. Move the cursor to cell A1.
- 2. Click in the formula area of the Formula bar.
- Use the backspace key to erase the "s," "e," and "n."

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Alternate Method: Edit a Cell by Double-Clicking in the Cell You can change "Joker" to "Johnson" as follows:

- 1. Move to cell A1.
- 2. Double-click in cell A1.
- 3. Press the End key. Your cursor is now at the end of your text.
- 4. Use the Backspace key to erase "r," "e," and "k."
- 5. Type hnson.
- 6. Press Enter.

Change a Cell Entry

Typing in a cell replaces the old cell entry with the new information you type. An example of changing a cell entry is demonstrated below

- 1. Move the cursor to cell A1.
- 2. Type Cathy.



3. Press Enter. The name "Cathy" replaces "Johnson."

Wrap Text

When you type text that is too long to fit in the cell, the text overlaps the next cell. If you do not want it to overlap the next cell, you can wrap the text.



- 1. Move to cell A2.
- 2. Type Text too long to fit.
- 3. Press Enter.
- 4. Return to cell A2.
- 5. Choose the Home tab.
- Click the Wrap Text button
 Wrap Text
 Excel wraps the text in the cell.

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Delete a Cell Entry

To delete an entry in a cell or a group of cells, you place the cursor in the cell or select the group of cells and press Delete.

Save a File

This is the end of Lesson1. To save your file:

- 1. Click on **File** on the Menu bar. A backstage view appears (as described in backstage view previous session).
- 2. Click **Save**. The Save As dialog box appears.
- 3. Select the location you want to save your file.
- 4. Type **Lesson1** in the File Name field.
- 5. Click Save. Excel saves your file in the location selected

Adjusting Column Width and Row Height

Whenever you type text that is too long to fit into a cell, Microsoft Excel attempts to display all the text. It left-aligns the text regardless of the alignment you have assigned to it, and it borrows space from the blank cells to the right. However, a long text entry will never write over cells that already contain entries—instead, the cells that contain entries cut off the long text. The following exercise illustrates this.

	Α	В	С	D	E	F	G	Н					
6	6 Now is the time for all good men to go to the aid of their army.												
7							10	3					
8							U	2					
9													

- 1. Move to cell A6.
- 2. Type now is the time for all good men to go to the aid of their army.
- 3. Press Enter. Everything that does not fit into cell A6 spills over into the adjacent cell.

	А	В	C	D	E	F	G	Н
6	Now is the	Test	←					
7			` @	(F)				
8			Ð	9				
9								

- 4. Move to cell B6.
- 5. Type **Test**.
- 6. Press Enter. Excel cuts off the entry in cell A6.

	A6	• ()	fx	Now is t	he time for	all good r	men to go to	the aid of t	heir army
4	A	В	С	D	E	F	G	Н	1
5	Now is the	Test							
7		×					0		
8		1	2				0		
9			0						

- 7. Move to cell A6.
- 8. Look at the Formula bar. The text is still in the cell.

Book1 - Microsoft Excel	
Home Home Pag Strinulas Data Review View Add-Ins	😡 _ 🕫 x
A Callori 11 Image: Callori Image: Callori <td>2 ³th Insert · E · 27 m 3th Delete · 3 · 27 m D J zomas · Sort 0 · 3 C III Size · 10 · 10 · 10 · 10 · 10 · 10 · 10 · 1</td>	2 ³ th Insert · E · 27 m 3 th Delete · 3 · 27 m D J zomas · Sort 0 · 3 C III Size · 10 · 10 · 10 · 10 · 10 · 10 · 10 · 1
A6 • Jac Now is the time for all good men to go to the aid	oft L Row Height
A B C D E F G H 6 Now is the Test 7 8 Column Width	Autofit Row Height
	Visibility
10 Column width: 55 5	Hide & Unhide
12 OK Cancel	Organize Sheets
13 14 15	Bename Sheet Move or Copy Sheet Tab Color
16	Protection
17 0	Qu Protect Sheet
18	Dock Cell
20	Format Cells
21	
22	
23	Ŧ
H + H Sheet1 Sheet2 / Sheet3 /	

Presented with the above problem, you can increase column width(s). Increasing the column width enables you to see the long text.

Change Column Width

- 1. Make sure you are in any cell under column A.
- 2. Choose the Home tab.
- 3. Click the down arrow next to Format in the Cells group.
- 4. Click Column Width. The Column Width dialog box appears.

- 5. Type **55** in the Column Width field.
- 6. Click OK. Column A is set to a width of 55. You should now be able to see all of the text.

	A6	- (1	fs.	Now is the time for all good me	en to go to th	e aid of the	ir army.	
-	li i			1	¥.	В	С	D	E
6	Now is the t	time for a	II goo	d men t	o go to the aid of their army.	Test			
7									

Change a Column Width by Dragging

You can also change the column width with the cursor.

- Place the mouse pointer on the line between the B and C column headings. The mouse pointer should look like the one displayed here +, with two arrows.
- 2. Move your mouse to the right while holding down the left mouse button. The width indicator Width: 20.00 (247 pixels) appears on the screen.
- 3. Release the left mouse button when the width indicator shows approximately 20. Excel increases the column width to 20

Insert and Delete Columns and Rows



You can insert and delete columns and rows. When you delete a column, you delete everything in the column from the top of the worksheet to the bottom of the worksheet. When you delete a row, you delete the entire row from left to right. Inserting a column or row inserts a completely new column or row.

Insert and Delete Columns and Rows

To delete columns F and G:

1. Click the column F indicator and drag to column

G.

- 2. Click the down arrow next to Delete in the Cells group. A menu appears.
- 3. Click Delete Sheet Columns. Excel deletes the columns you selected.
- 4. Click anywhere on the worksheet to remove your selection.

To Delete Rows 7 through 12:

- 1. Click the row 7 indicator and drag to row 12.
- 2. Click the down arrow next to Delete in the Cells group. A menu appears.
- 3. Click Delete Sheet Rows. Excel deletes the rows you selected.



4. Click anywhere on the worksheet to remove your selection.

To Insert a Column:

- 1. Click on Column heading A to select column A.
- 2. On the Home Tab, locate the cells group. Click the Insert button. A new column is inserted to the left of the selected column in the worksheet

To Insert Rows:

- 1. Click on Row heading 1 to select Row 1.
- 2. On the Home Tab, locate the cells group. Click the Insert button. A new row is inserted above the selected row in the worksheet automatically.

Copy, Cut, Paste

In Excel, you can copy data from one area of a worksheet and place the data you copied anywhere in the same or another worksheet. In other words, after you type information into a worksheet, if you want to place the same information somewhere else, you do not have to retype the information. You simple copy it and then paste it in the new location.

You can use Excel's Cut feature to remove information from a worksheet. Then you can use the Paste feature to place the information you cut anywhere in the same or another worksheet. In other words, you can move information from one place in a worksheet to another place in the same or different worksheet by using the Cut and Paste features.

Copying with the Ribbon

To copy the formula you just entered, follow these steps:



- 1. You should be in cell A12.
- 2. Choose the Home tab.
- Click the Copy button in the Clipboard group. Excel copies the formula/content in cell A12.
- You can paste the copied content/formula at a different location using the paste button

Cut and Paste

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	A	B	С	D	E	F	(з н і
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3	1	3	3	3		3		
4	3	5	12	4		9		
5								
0	26							
-	36							
0	1	2	1	2				
10	1	2	1	2		-		
11	1	2	1	2	-	- (T)		
12	3	6	3	2		~		
13	5	0	5					

You can move data from one area of a worksheet to another.

- 1. Select cells D9 to D12
- 2. Choose the Home tab.
- 3. Click the Cut 🎽 button.
- 4. Move to cell G1.
- 5. Click the Paste button 5. Excel moves the contents of cells D9 to D12 to cells G1 to G4.

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1	Add	Subtract	Multiply	Divide		3		2 4 (5)
2	2	8	4	12		3		2
3	1	3	3	3		3		2
4	3	5	12	4		9		3
5								
6								
7	36							
8								
9	1	2	1					
10	1	2	1					
11	1	2	1					
12	3	6	3					

WINDOWS AND OFFICE CLIPBOARD

WINDOWS CLIPBOARD

The Windows Clipboard is a place where the most recently cut or copied value is stored. This can be a value from Excel or any other Windows application. For example, you can copy a value from a web browser and paste it into a Notepad, Word, Excel, etc.

Each clipboard value is replaced by the next one that is copied or cut because the Windows Clipboard stores a single value at a time.

Similarly to the Windows clipboard, the Office Clipboard stores only one-last copied or cut value. If you need Excel to remember more than a single value, click the button in the **HOME >> Clipboard** group.



The Office Clipboard will appear on the left side. Start copying cell contents, and they will appear automatically on the clipboard list.

If you want to insert one of those values, select the cell where you want the value to be pasted and click the value from the clipboard. You can paste all values at once by using the **Paste All** button. If you want to get rid of the contents of the clipboard, click **Clear All**.

Clipboar	d	- ×
Paste All	Clear All	
Click an Item to	Paste:	
2014-12-1	2	
រឿ 23		
🗐 text		

Align Cell Entries

When you type text into a cell, by default your entry aligns with the left side of the cell. When you type numbers into a cell, by default your entry aligns with the right side of the cell. You can change the cell alignment. You can center, left-align, or right-align any cell entry. Look at cells A1 to D1. Note that they are aligned with the left side of the cell.



Center

To center cells A1 to D1:

- 1. Select cells A1 to D1.
- 2. Choose the Home tab.
- 3. Click the Center button in the Alignment group. Excel centers each cell's content.



Left-Align

To left-align cells A1 to D1:

- 1. Select cells A1 to D1.
- 2. Choose the Home tab.
- 3. Click the Align Text Left 📕 button in the Alignment group. Excel left-aligns each cell's content.

Right-Align

To right-align cells A1 to D1:

- 1. Select cells A1 to D1. Click in cell A1.
- 2. Choose the Home tab.
- 3. Click the Align Text Right 🔳 button. Excel right-aligns the cell's content.
- 4. Click anywhere on your worksheet to clear the highlighting.

Sul	otra	ct	Mult	iply	Div	ide						
		8		4			12					
	Q	T	a 9	(° -) Ŧ		1				1	Bool
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	2		2		8			4		12		

Formula

Add

e Layout

Boo

Data

E

Create Borders

You can use borders to make entries in your Excel worksheet stand out. You can choose from several

🗐 🤊

Home

A1

A

Add

Paste

1 2 Calibri

B

в

2

types of borders. When you press the down arrow next to the Border button , a menu appears. By making the proper selection from the menu, you can place a border on the top, bottom, left, or right side of the selected cells; on all sides; or around the outside border. You can have a thick outside border or a border with a single-line top and a double-line bottom. Accountants usually place a single underline above a final number and a double underline below. The following illustrates:

Create Borders



- 1. Select cells B6 to E6.
- 2. Choose the Home tab.
- Click the down arrow next to the Borders button
 A menu appears.
- 4. Click Top and Double Bottom Border. Excel adds the border you chose to the selected cells.

	A	В	С	D	E	F	G
1							
2							
3		Add	Subtract	Multiply	Divide		
4		2	8	4	12		
5		1	3	3	3		
6		3	5	12	4		
7							
8							



UNIT 3

FORMULAS, BASIC MATHEMATICAL CALCULATIONS AND FORMATTING DATA

UNIT GOALS

After completing this course you will be able to:

- Perform simple calculations in excel.
- Use cell references in formulas.
- Use functions (prewritten formulas) in excel

SESSION 1: ENTERING A FORMULA IN A WORKSHEET

FORMULAS TAB

All functions that are available in Excel can be found in this tab. They are divided into categories, which you can access by clicking one of the buttons.



PERFORM BASIC MATHEMATICAL CALCULATIONS

In Microsoft Excel, you can enter numbers and mathematical formulas into cells. Whether you enter a number or a formula, you can reference the cell when you perform mathematical calculations such as addition, subtraction, multiplication, or division. When entering a mathematical formula, precede the formula with an equal sign (=).

Addition

- 1. Type **Add** in cell A1.
- 2. Press Enter. Excel moves down one cell.
- 3. Type **1** in cell A2.
- 4. Press Enter. Excel moves down one cell.
- 5. Type **1** in cell A3.
- 6. Press Enter. Excel moves down one cell.
- 7. Type **=A2+A3** in cell A4.



8. Click the check mark on the Formula bar. Excel adds cell A1 to cell A2 and displays the result in cell A4. The formula displays on the Formula bar.

Subtraction

*	Go to:		
			*
T			+

- 1. Press F5. The Go To dialog box appears.
- 2. Type **B1** in the Reference field.
- 3. Press Enter. Excel moves to cell B1.

- 4. Type Subtract.
- 5. Press Enter. Excel moves down one cell.
- 6. Type **6** in cell B2.
- 7. Press Enter. Excel moves down one cell.
- 8. Type **3** in cell B3.
- 9. Press Enter. Excel moves down one cell.
- 10. Type **=B2-B3** in cell B4.
- 11. Click the check mark on the Formula bar. Excel subtracts cell B3 from cell B2 and the result displays in cell B4. The formula displays on the Formula bar.



Multiplication

- 1. Hold down the Ctrl key while you press "g" (Ctrl+G). The Go To dialog box appears.
- 2. Type **C1** in the Reference field.
- 3. Press Enter. Excel moves to cell C1
- 4. Type **Multiply**.
- 5. Press Enter. Excel moves down one cell.
- 6. Type **2** in cell C2.
- 7. Press Enter. Excel moves down one cell.
- 8. Type **3** in cell C3.
- 9. Press Enter. Excel moves down one cell.
- 10. Type **=C2*C3** in cell C4.
- 11. Click the check mark on the Formula bar. Excel multiplies C1 by cell C2 and displays the result in cell C3. The formula displays on the Formula bar.

Division

- 1. Press F5.
- 2. Type **D1** in the Reference field.
- 3. Press Enter. Excel moves to cell D1.
- 4. Type **Divide**.
- 5. Press Enter. Excel moves down one cell.
- 6. Type **6** in cell D2.
- 7. Press Enter. Excel moves down one cell.
- 8. Type **3** in cell D3.
- 9. Press Enter. Excel moves down one cell.
- 10. Type **=D2/D3** in cell D4.
- 11. Click the check mark on the Formula bar. Excel divides cell D2 by cell D3 and displays the result in cell D4. The formula displays on the Formula bar.

When creating formulas, you can reference cells and include numbers. All of the following formulas are valid:

=A2/B2 =A1+12-B3 =A2*B2+12 =24+53

AutoSum

You can use the AutoSum button Σ on the Home tab to automatically add a column or row of numbers. When you press the AutoSum button Σ , Excel selects the numbers it thinks you want to add. If you then click the check mark on the Formula bar or press the Enter key, Excel adds the numbers. If Excel's guess as to which numbers you want to add is wrong, you can select the cells you want.

The following illustrates AutoSum:

- 1. Go to cell F1.
- 2. Type **3.**
- 3. Press Enter. Excel moves down one cell.
- 4. Type **3**.
- 5. Press Enter. Excel moves down one cell.
- 6. Type **3**.



- 7. Press Enter. Excel moves down one cell to cell F4.
- 8. Choose the Home tab.
- 9. Click the AutoSum button Σ in the Editing group. Excel selects cells F1 through F3 and enters a formula in cell F4.
- 10. Press Enter. Excel adds cells F1 through F3 and displays the result in cell F4.

Perform Automatic Calculations

By default, Microsoft Excel recalculates the worksheet as you change cell entries.

Automatic Calculation

Make the changes described below and note how Microsoft Excel automatically recalculates.

- 1. Move to cell A2.
- 2. Type **2**.
- Press the right arrow key. Excel changes the result in cell A4. Excel adds cell A2 to cell A3 and the new result appears in cell A4.
- 4. Move to cell B2.
- 5. Type **8**.
- 6. Press the right arrow key. Excel subtracts cell B3 from cell B3 and the new result appears in cell B4.
- 7. Move to cell C2.
- 8. Type **4**.
- 9. Press the right arrow key. Excel multiplies cell C2 by cell C3 and the new result appears in cell C4.
- 10. Move to cell D2.
- 11. Type **12**.
- 12. Press the Enter key. Excel divides cell D2 by cell D3 and the new result appears in cell D4.



SESSION 2: FUNCTIONS AND FORMULAS

A formula performs calculations or other actions on the data in your worksheet. A function is a preset formula in Excel. It is important to understand the following information about functions and formulas. A formula and a function always begins with an equal sign (=). The data Excel will use to calculate a function is enclosed in parentheses (). Formulas do not include parentheses.

How to Specify Individual Cells

When there is a comma (,) between cell references in a function, Excel uses each cell to perform the calculation. For example, the function =SUM (A1, A2, A3) is the same as the formula =A1+A2+A3.

How to Specify a Group of Cells

When there is a colon (:) between cell references in a function, Excel uses the specified cells and all cells between them to perform the calculation. For example, the function =SUM (A1:A3) is the same as the formula =A1+A2+A3.

Common Functions

The following are some common functions used in Excel:

Calculates the average value of a list of numbers. Average _ Finds the largest value in a list of numbers. Max Sum Adds a list of numbers. _ Count Counts the number of items in a list. _ Min Finds the lowest value in a list of numbers. _ Round _ Rounds a value to a specific number of digits.

ENTERING A FORMULA

The following instructions explain how to enter a formula.

- 1. Click on the cell where you want to enter a formula. This is where the answer will appear. In the Figure below , cell G4 has been selected.
- 2. Type an equal sign (=) to begin the formula (see cell G5).
- 3. Then type the formula (=C5+D5).
- 4. Press Enter on your keyboard, and the results of the calculation should appear in the selected cell
- 5. To view the formula that you entered, click the cell containing the formula and it will appear in the formula bar

	А	В	с	D	E	F	G	н	I
1	Income St	atement							-
2									
3			January	February	March		Total		
4									
5	Revenue		8700	11500	13670		=C5+D5	← Fo	ormula
6			7		R				
7	Payroll		3850	4850	5250				
8	Rent		1750	1758	1750				
9	Supplies		1925	1980	2030	$\backslash \Box$			
10	Total Exp		7525				ells includ	ed in	
11							the formu	la.	
12	Income		1.23E+14						
13									
14			*****						
15									
16									
17									
18			L.						

	Α	В		С	1	D	E	F	G	н	I
1	Income St	atement									
2			1	-							
3			Jai	FOI	nuia	ваг /	March		Total		
4									\frown		
5	Revenue			8	700	11500	13670	(20200)	
6									\sim		
7	Payroll			3	850	4850	5250				
8	Rent			1	750	1750	1750				
9	Supplies			1	925	1980	2030				
10	Total Exp			7	525						
11											
12	Income			1.23E	+14						
13											
14			###	*****	###						
15											
16											
17											
							Forn	ามไต	Rar		

EDITING A FORMULA

Sometimes you may need to change a formula to include additional cells, remove cells, etc. The following instructions explain how to edit a formula.

- 1. Click on the cell containing the formula that you would like to edit and the formula will be shown inside the formula bar.
- 2. Click inside the formula bar and make the necessary changes (E4 was added to the formula).
- 3. After making the necessary changes, press Enter and the answer will appear in the selected cell

FI	LE HOME	INSERT	PAGE LAYOUT	FORMULA	AS DATA	REVIEW	VIEW	ADD-INS	
f. Ins Func	AutoSur tion	m Recently Fi Used -	nancial Logical Te	xt Date & Lo Time - Re	ookup & Math ference * Trig	& More • Functions	Name Manager	E Define Name Use in Form Create from Defined Names	la → Selection
	Α	в	С	D	E	F	G	н	I
1 2 3	Income St	atement	January	February	March		Total		
5 6	Revenue		8700	11500	13670		5+D5+E5	1	
7	Payroll		3850	4850	5250				
8	Rent		1750	1750	1750		Selecte	d	
9 10 11	Supplies Total Exp		1925 7525	1980	2030		Cell		
12 13	Income		1.23E+14						
14 15 16			*****						

BASIC FUNCTIONS

This section discusses some of the basic functions in Ms Excel. Below are some of the most used functions in excel.

SUM

Sum – Adds a list of numbers. Example = SUM (B3:B7) or = SUM (B3,B4,B5,B6,B7)
AVERAGE

Average	 Calculates 	the av	verage valu	le of	a list of n	umb	ers.	Exam	ple: <mark>= AVE</mark> F	AGE (B3:B)	7)	
MAX												
Max – Fi	nds the large	st valı	ue in a list	of nu	ımbers. E	xam	ple:	=MA>	((B3:B7) or	=MAX(B3,	,B4,B5,B6	,B7)
MIN												
Min – Fi	nds the small	est va	lue in a list	ofr	umbers.	Exar	nple	e =MIN	I (B3:B7) or	=MIN(B3,	B4,B5,B6,	B7)
COUNT												
Count-	Calculates	the	number	of	values	in	а	list.	Example	=COUNT	(B3:B7)	or
=COUN1	(B3,B4,B5,B6	5,B7)										
ROUND												
					.				_			

Round – Rounds a value to a specific number of digits. Example: =ROUND (B9, 2)

Entering a Function using the insert function (fx)

Excel helps you enter functions in your worksheet. Functions let you perform calculations without typing long, complex formulas. The following explains how to enter functions using the insert function button (fx).

- 1. Click to select the cell where you want to enter the function on the worksheet.
- 2. Click the Insert Function (fx) button on the Formula Bar

A	A3 • : × • f*									
	Α	В	С	D	E	F				
1	Income Statement									
2										
3		January	February	March	1					
4	Payroll	3850	4850	5250						
5	Rent	1750	1750	1750						
6	Supplies	1925	1980	2030						
7	Total Exp									
8										
9										
10										

Formula Bar

- 3. The *Insert Function* dialog box will appear. Select the category that contains the function that you want to use (example: SUM) and click OK. **Note**: If you do not know which category contains the function that you want to use, use the Function Search Field to search for the needed function.
- 4. The Function Arguments dialog box will appear.
- 5. Select the cell(s) in the worksheet that contain(s) the number(s) to be used in the formula.
- 6. The Number 1 field now displays the cell reference you selected.

- 7. The *Function Arguments* dialog box will appear.
- 8. Select the cell(s) in the worksheet that contain(s) the number(s) to be used in the formula.
- 9. The Number 1 field now displays the cell reference you selected.
- 10. Click **OK**. The results of the formula will appear in the selected cell.

B7	• • • E	× ✓	<i>f</i> _x =												
	А	В	с	D	E	F	G	н	I	J	к	L	м	N	0
1	Income Statement														
2															
3		January	February	March											
4	Payroll	3850	4850	5250											
5	Rent	1750	1750	1750											
6	Supplies	1925	1980	2030											
7	Total Exp	=		_											
8				Insert F	unction				6	x					
9				Search	for a functio	nn:									
10				Tur	a brief dese	sintian of us		te de and ti		~					1
11				click	Go	ription of wr	lat you warn			<u>6</u> 0		Se	arch Fu	nction	
12				Orse	elect a catego	ony: Most Re	cently Used		-						
13				Salact	a function										
14	Select a Fu	oction		Select	a functio <u>n</u> .										
15				AVE	RAGE										
17	L			IF HVD	FRIINK					=					
18				COL	JNT										
19				SIN	(-					_
20				SUM	(number1,nu	umber2,)		1				Dec	crintia	of the	
21				Add	all the num	bers in a ran	ge of cells.	←						motion	
22												sele	screa fu	metion.	
23															_
24															
25				Help o	n this function	on		OK		Cancel					
26					_	-		_							
27															
28															
29															
30															

Insert Function

Function Arguments	? ×
SUM Number1 B4:B6 Selected Cells Adds all the numbers in a range of cells.	Answer
Number1: number1,number2, are 1 to 255 numbers to sum. text are ignored in cells, included if typed as argum	Logical values and ents.
Formula result = 7525	
Help on this function OK	Cancel

Function Arguments

Auto Calculate

The following instructions explain how to use auto calculate.

- 1. Select the cells that you want to include in the calculation.
- 2. The status bar will display the Sum and/or the Average of the cells that you selected.



- 3. Other calculations can also appear on the status bar. To see the other calculations available, right-click on the status bar.
- 4. A list will appear displaying the calculations you can perform.
- 5. Select the calculation of your choice.
- The results of the calculation will appear in the Auto Calculate area of the status bar.

AutoSum alternative 1

The following steps explains one way to use the AutoSum feature.

- 1. Click to select the cell where you want the answer to appear.
- 2. Click the AutoSum button located on the Ribbon as shown in the Figure below.
- 3. Select the Function of your choice, for example, Sum
- 4. Adjust the highlighted selection box to capture the numbers that need to be manipulated by clicking and dragging one of the corner sizing handle.

FILE	HOME INSERT	PAGE LAYOUT	FORMULAS	DATA REVIEW	VIEW	ADD-INS ACR	OBAT						\sim	$j \sim \zeta $	
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1	Income Staten	nent												•	
2															
3		January	February	March											
4	Revenue	8700	11500	13670										utoSum button	
5	Expenses:													Functions	
6	Payroll	\$3,850.00	\$4,850.00	\$ 5,2 50.00											
7	Rent	\$1,750.00	\$1,750.00	\$1,750.00											
8	Supplies	\$1,925.00	\$1,980.00	\$2,030.00	_		_								
9	Total Exp	7525		←		Selected ce									
10															
11															

✓ <u>A</u>verage
 ✓ <u>C</u>ount
 Numerical Count
 Minimum
 Maximum
 ✓ <u>S</u>um

Selecting numbers

	: X	✓ <i>f</i> _x =SU	IM(C6:C8)			
	А	В	С	D	E	F
1	Income Stater	ment				
2						
3		January	February	March		
4	Revenue	8700	11500	13670		
5	Expenses:					
6	Payroll	\$3,850.00	\$4,850.00	\$ 5,2 50.00		
7	Rent	\$1,750.00	\$1,750.00	\$1,750.00		
8	Supplies	\$1,925.00	\$1,980.00	\$2,030.00		
9	Total Exp	7525	=SUM(<mark>C6:C8</mark>)		
10			SUM(number1,	number2],)		
11						
12						

5. Press the *Enter* key to insert the answer.

AutoSum alternative 2

The following explains a second way to gain the sum of numbers.

- 1. Click to select the cell where you want the results of the formula to appear.
- 2. Type the equal sign (=).
- 3. Choose one of the following methods to enter your formula
 - a. Type the cell reference
 - b. Click the cell containing the number that you want to use in your formula
- 4. Type an operator (plus sign (+)) for addition.
- 5. Repeat steps 3 and 4 as often as necessary to build your formula.
- 6. Press the Enter key so that the answer appears in the cell.

	: ×	✓ <i>f</i> _x =D6	+D7+D8				
	А	В	С	D	E	F	G
1	Income Stater	nent					
2							
3		January	February	March			
4	Revenue	8700	11500	13670			
5	Expenses:						
6	Payroll	\$3,850.00	\$4,850.00	\$ 5,2 50.00	<		
7	Rent	\$1,750.00	\$1,750.00	\$1,750.00	←		ell
8	Supplies	\$1,925.00	\$1,980.00	\$2,030.00	*	Kere	enees
9	Total Exp	\$7,525.00	\$8,580.00	=D6+D7+D8			
10				↑			
11							
12							
13				Enter Formu	a		

Sum of Numbers

Standard Deviation

The Standard Deviation of a set of data is a statistical measure of how widely the data varies, for example a very similar set of numbers would have a small standard deviation, whereas a very diverse set of numbers would have a large standard deviation. To highlight how important the standard deviation is, statistics are often reported as the average and the standard deviation. While the technical definition of standard deviation is somewhat complicated, it can easily be found in any Statisticstextbook.

4	А	В
1	1	
2	2	
3	3	
4	4	
5		
6 =	STDEV(A1:	44)

Excel uses the shortened form of Standard Deviation, STDEV, as a function. See Figure for an example of how to use the STDEV function.

Lookup Functions

Excel 2013 provides two lookup functions that you can use to quickly retrieve information from data in a table. The functions are called HLOOKUP (horizontal lookup) and VLOOKUP (vertical lookup). VLOOKUP will be discussed in detail in this section and HLOOKUP in class.

The VLOOKUP function will look in the leftmost column of a table for a value you specify. When it finds the value you specified, it will return a value that is located in the same row, a specified number of columns into the table. It is called VLOOKUP because it looks vertically down a column for a match, and then retrieves data from across the row.

HLOOKUP is similar, but it will look horizontally across the upper row of your table, and then retrieve data from a column further down.

Using VLOOKUP to Find Data

The best way to learn how lookup functions work is to look at an example. Here we have a table of ticket prices for flights to different countries. To simplify matters, the data range for the table has been given a defined name (Price) that can be used in functions and formulas. If we activate cell F1 and enter =VLOOKUP ("England", Price,2) into the formula bar, cell F1 will show the value 550.

=VLOOKU	P("England	",Price,2)			
D	E	F	G	Н	-
		550			
		-			
			P	rice	
			Country	Ticket Price	
			Brazil	400	
			China	850	
			Denmark	600	
			England	550	
			France	565	
			Germany	575	
			Hungary	625	
			Italy	690	
			Japan	925	
			Portugal	700	

The lookup function looked vertically down the leftmost column of the lookup table (Price) until it found a match for the text string "England." The function then returned the value that is in the second (2) column of the table, from the row where the match was found. You should notice that England, Price, and 2 are the exact arguments used in the function.

The arguments for the lookup function are: VLOOKUP

- Value to match, from the left most column of the lookup table
- Lookup table name or range
- Number of the column in the table containing the relevant data
- TRUE or FALSE

For the example shown above, the true or false argument was left out. The relevance of the true or false argument in the VLOOKUP function will be discussed shortly.

HLOOKUP is the same as VLOOKUP, except that it looks across rows for a match rather than down columns. To use HLOOKUP, the lookup table would be arranged in this way.

Brasil	China	Denmark	England	France	Germany	Hungary	Italy	Japan
40) 850	600	550	565	575	625	690	925

Since Excel is designed with more cells in the vertical direction than in the horizontal direction, and because, a vertical table design is more intuitive for most people, VLOOKUP is generally used more often than HLOOKUP.

How to Find an Exact Match with VLOOKUP

As mentioned briefly before, the VLOOKUP function can take a final argument of either TRUE or FALSE. If you specify this final argument as **FALSE**, VLOOKUP will search for an **exact match** in the lookup column (column of identifiers). If it cannot find an exact match, no data will be returned with the error #N/A!

THE FUNCTION LIBRARY

While there are hundreds of functions in Excel, the ones you use most frequently will depend on the type of data your workbooks contains. There is no need to learn every single function, but exploring some of the different types of functions will be helpful as you create new projects. You can search for functions **by category**, such as **Financial**, **Logical**, **Text**, **Date & Time**, and more from the **Function Library** on the **Formulas** tab.

• To access the Function Library, select the Formulas tab on the Ribbon. The Function Library will appear.

FILE	HOME	INSER	T PA	GE LAYO	лл	FORM	ULAS	DATA	REVIEW
fx	Σ	*		?	Α		٩	<u> </u> e	
Insert	AutoSum	Recently	Financial	Logical	Text	Date &	Lookup	& Math	Nore More
Function	+	Used -	•	•	•	Time 🕶	Reference	ce∙ Trig	 Functions •
				Function	n Librar	y			

Autofill Cells

You can use Microsoft Excel to fill cells automatically with a series. For example, you can have Excel automatically fill your worksheet with days of the week, months of the year, years, or other types of series. The following steps demonstrates filling the days of the week using the autofill function:

- 1. Click the Sheet2 tab. Excel moves to Sheet2.
- 2. Move to cell A1.
- 3. Type **Sun**.
- 4. Move to cell B1.
- 5. Type Sunday.
- 6. Select cells A1 to B1.
- 7. Choose the Home tab.
- 8. Click the Bold button ^B. Excel bolds cells A1 to B1.
- 9. Find the small black square in the lower-right corner of the selected area. The small black square is called the fill handle.
- 10. Grab the fill handle and drag with your mouse to fill cells A1 to B14. Note how the days of the week fill the cells in a series. Also, note that the Auto Fill Options button appears.



	•	D	6	D
	A	D	C	U
1	Sun	Sunday		
2	Mon	Monday		
3	Tue	Tuesday		
4	Wed	Wednesda	Y	
5	Thu	Thursday		
6	Fri	Friday		
7	Sat	Saturday		
8	Sun	Sunday	-	- 10
9	Mon	Monday		
10	Tue	Tuesday		
11	Wed	Wednesda	Y	
12	Thu	Thursday		
13	Fri	Friday		
14	Sat	Saturday		
15			F. 🔶	
16		Auto	Fill Opti	one Button
17		Auto	i ili Opu	ons Dutton
18				

Copy Cells

- 1. Click the Auto Fill Options button. The Auto Fill Options menu appears.
- Choose the Copy Cells radio button. The entry in cells A1 and B1 are copied to all the highlighted cells.
- 3. Click the Auto Fill Options button again.
- 4. Choose the Fill Series radio button. The cells fill as a series from Sunday to Saturday again.
- 5. Click the Auto Fill Options button again.
- Choose the Fill without Formatting radio button. The cells fill as a series from Sunday to Saturday, but the entries are not bolded.
- 7. Click the Auto Fill Options button again.
- 8. Choose the Fill Weekdays radio button. The cells fill as a series from Monday to Friday.

Create Headers and Footers

You can use the Header & Footer button on the Insert tab to create headers and footers. A header is text that appears at the top of every page of your printed worksheet. Footer is text that appears at the bottom of every page of your printed worksheet. When you click the Header & Footer button, the Design context tab appears and Excel changes to Page Layout view. A context tab is a tab that only appears when you need it. Page Layout view structures your worksheet so that you can easily change the format of your document. You usually work in Normal view.

You can type in your header or footer or you can use predefined headers and footers. To find predefined headers and footers, click the Header or Footer button or use the Header & Footer Elements group's buttons. When you choose a header or footer by clicking the Header or Footer

4	Α	В	С	D	E
1	Sun	Sunday			
2	Sun	Sunday			
3	Sun	Sunday			
4	Sun	Sunday			
5	Sun	Sunday			
6	Sun	Sunday			
7	Sun	Sunday			
8	Sun	Sunday	Copy	Cells	-2
9	Sun	Sunday	O Fill Se	ries	Ý
10	Sun	Sunday	0 500 50		
11	Sun	Sunday		rmatting On	ly
12	Sun	Sunday	O Fill W	ithout Forma	atting
13	Sun	Sunday	• Fill <u>D</u> a	ays	
14	Sun	Sunday	O Fill W	eekdays	
15			E • 🗲	-1	
16				\cup	
17					
18					

button, Excel centers your choice. The figure shown below indicates each of the Header & Footer Elements group button options.



Both the header and footer areas are divided into three sections: left, right, and center. When you choose a Header or Footer from the Header & Footer Elements group, where you place your information determines whether it appears on the left, right, or center of the printed page. You use the Go To Header and Go To Footer buttons on the Design tab to move between the header and footer areas of your worksheet.

NOTE: Headers and footers are not displayed on the worksheet in Normal view — they are displayed only in Page Layout view and on the printed pages. For Excel worksheets, you can insert headers or footers in Page Layout view where you can see them. You can also use the Page Setup dialog box if you want to insert headers or footers for more than one worksheet at the same time. For other sheet types, such as chart sheets, you can insert headers and footers only by using the Page Setup dialog box.

Format Numbers

You can format the numbers you enter into Microsoft Excel. For example, you can add commas to separate thousands, specify the number of decimal places, place a dollar sign in front of a number, or display a number as a percent.



- 1. Move to cell B8.
- 2. Type **1234567**.
- 3. Click the check mark on the Formula bar.

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B8 (Alignment [1]	12 1234567.00	
B C D 8 1234567.00	E	Currency \$1,234,567.00	
9 10		Accounting \$1,234,567.00	
11 12		Short Date 2/15/5280	
13 14		Long Date Thursday, February 15, 5280	
15 16	(Time 12:00:00 AM	
17 18 10		% Percentage 123456700.00%	-
20 21		More Number Formats	

- 4. Choose the Home tab.
- 5. Click the down arrow next to the Number Format box. A menu appears.

6	1) ,		Bo	ook1 - Micro	osoft Excel	
Ų	Home	rt Page Layo	out Formula	os Data	Review	View Ac	id-ins
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	В	C	D	F	F	G	Н
8	B \$1,234,567.000	C	D	E	F	G	Н
8 9	B \$1,234,567.000	C	D	Ε	F	G	Н
8 9 10	B \$1,234,567.000	C	D	E	F	G	Н
8 9 10 11	B \$1,234,567.000	C	D	Ε	F	G	H

- 6. Click Number. Excel adds two decimal places to the number you typed.
- 7. Click the Comma Style button •. Excel separates thousands with a comma.
- Click the Accounting Number Format button s. Excel adds a dollar sign to your number.
- Click twice on the Increase Decimal button to change the number format to four decimal places.
- 10. Click the Decrease Decimal button if you wish to decrease the number of decimal places.

Change a Decimal to a Percent.





- 1. Move to cell B9.
- 2. Type **.35** (note the decimal point).
- 3. Click the check mark on the formula bar.
- 4. Choose the Home tab.
- 5. Click the Percent Style button¹⁶. Excel turns the decimal to a percent.

Create Borders

You can use borders to make entries in your Excel worksheet stand out. You can choose from several types of borders. When you press the down arrow next to the Border button , a menu appears. By making the proper selection from the menu, you can place a border on the top, bottom, left, or right side of the selected cells; on all sides; or around the outside border. You can have a thick outside border or a border with a single-line top and a double-line bottom. Accountants usually place a single underline above a final number and a double underline below.



The following illustrates:

Create Borders

- 1. Select cells B6 to E6.
- 2. Choose the Home tab.
- Click the down arrow next to the Borders button
 A menu appears.

4. Click Top and Double Bottom Border. Excel adds the border you chose to the selected cells.



Merge and Center

Sometimes, particularly when you give a title to a section of your worksheet, you will want to center a piece of text over several columns or rows. The following example shows you how.

- 1. Go to cell B2.
- 2. Type Sample Worksheet.
- 3. Click the check mark on the Formula bar.
- 4. Select cells B2 to E2.
- 5. Choose the Home tab.
- Click the Merge and Center button in the Alignment group. Excel merges cells B2, C2, D2, and E2 and then centers the content.

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1	1 X	Calibri - :	11 - =	= = :	General	-	🔠 Cond	itional F
	La .	B <i>I</i> <u>U</u> -	A A 📕			%(6)	Form	at as Ta
Pas	te 💰	🗉 - 🖄 - A	- #	律	.68 .00		🚽 Cell S	tyles *
Clipb	oard ⁿ	Font	Gi	Alignment	Numb	er ^{fa}		Styles
	B2	(3)	✓ f _x	Sample \	Norksheet			
	А	В	с	D	E	F		G
1								
2		Sample Wo	orksheet			-	-(4)
(1)(2)′	Add	Subtract	Multiply	Divide		\sim	
4	\sim	2	8	4	12			
5		1	3	3	3			
6		3	5	12	4			
7								
8								

	А	В	С	D	E	F
1						
2			Sample W	/orksheet		
3		Add	Subtract	Multiply	Divide	
4		2	8	4	12	
5		1	3	3	3	
6		3	5	12	4	
7						
8						

- 1. Select the cell you want to unmerge.
- 2. Choose the Home tab.
- 3. Click the down arrow next to the Merge and Center button. ➡ A menu appears.
- 4. Click Unmerge Cells. Excel unmerges the cells.

Add Background Color

To make a section of your worksheet stand out, you can add background color to a cell or group of cells.

Add Background Color

- 1. Select cells B2 to E3.
- 2. Choose the Home tab.
- Click the down arrow next to the Fill Color button
- Click the color dark blue. Excel places a dark blue background in the cells you selected.

	Α	В	С	D	E	F
1						
2			Sample W	/orksheet		
3		Add	Subtract	Multiply	Divide	
4	\odot	2	8	4	12	
5		1	3	3	3	
6		3	5	12	4	
7						
8						

Move to a New Worksheet

In Microsoft Excel, each workbook is made up of several worksheets. Each worksheet has a tab. By default, a workbook has three sheets and they are named sequentially, starting with Sheet1. The name of the worksheet appears on the tab. Before moving to the next topic, move to a new worksheet. The exercise that follows shows you how.

Move to a New Worksheet

• Click Sheet2 in the lower-left corner of the screen. Excel moves to Sheet2.



Work with Long Text

Whenever you type text that is too long to fit into a cell, Microsoft Excel attempts to display all the text. It left-aligns the text regardless of the alignment you have assigned to it, and it borrows space from the blank cells to the right. However, a long text entry will never write over cells that already contain entries—instead, the cells that contain entries cut off the long text. The following exercise illustrates this.

Work with Long Text

	Α	В	С	D	E	F	G	Н
6	Now is the	time for a	ll good men	to go to th	ne aid of th	eir army.	←	
7							10	3
8							\bigcirc	2
9								

- 1. Move to cell A6.
- 2. Type now is the time for all good men to go to the aid of their army.
- 3. Press Enter. Everything that does not fit into cell A6 spills over into the adjacent cell.

	А	В	C	D	E	F	G	Н
6	Now is the	Test	←					
7			` @	(F)				
8			Ð	9				
9								

- 4. Move to cell B6.
- 5. Type **Test**.
- 6. Press Enter. Excel cuts off the entry in cell A6.

	A6	• ()	$f_{\rm x}$	Now is t	he time for	all good m	en to go to	the aid of t	heir army.
4	A	В	С	D	E	FA	G	н	1
6	Now is the	Test							
7		×					0		
8		1	2				ి		
9			0						

- 7. Move to cell A6.
- 8. Look at the Formula bar. The text is still in the cell.

Data Validation

There may be situations when you want to prevent users from entering data that doesn't meet the conditions you specified.

Suppose that you have the cell in your worksheet where you want a user to enter his age. Therefore, as a condition you require the integer between **18** and **99**.

To set a condition, first, select the cell or the range of cells, then click **DATA** >> **Data Tools** >> **Data Validation**. After you do that, a new window will appear.

Data Validati	
Settings	Input Message Error Alert
Validation	criteria
Allow:	
Decimal	▼ Ignore <u>b</u> lank
Data:	
betweer	· ·
Minimum	
18	
Maximum	ĸ
67	
Apply t	nese changes to all other cells with the same settings
Clear All	OK Cancel

Settings

Here, you can specify which kind of data and range you want to set for the selected cells. You can use one of the following data types:

Whole number

Numbers that are not fractions (-12, 0, 4, etc.).

Decimal

These numbers can also be fractions (1.2, -1, 5, 4.6, etc.).

List

With this type of validation, you can choose from the drop-down menu one of the several items.

	Α	В	С	D
1				
2			-	
3		one		
4		two		
-4		three No		
5				

If you choose **List**, the new textbox, called **Source** will appear. In this textbox, you can select cells from the worksheet or enter values from the keyboard- for example "one,two,three" (or "one;two;three" depending on your system configuration).

Date

```
Here, you can enter date and time. ("3/14/2014", "14-Mar", "14").
```

Time

```
Here, you can enter an hour. For example: "12:00", "1:14:50 p.m.".
```

Text length

Here, you can specify the number of characters that must be entered. You can enter plain text, as well as numbers.

Custom

The custom validation is more complicated than other types of validation. Here, you can insert a formula with the specific parameters. At the bottom of the window, you will find the checkbox called **Apply this changes to all other cells with the same settings**. It means that if you click the cell and select this option, Excel will check in a worksheet (not a workbook) whether there are other cells with the same validation parameters. If so, all these cells will be selected and the changes applied.

Input Message

Here, you can set a pop-up window with title and input message. Now, when you click the cell, a window with entered message will appear.

Removing validation

If you want to remove the validation from the cells, first select these cells, then click the **Clear All** button in the lower left corner of the **Settings** tab. Click **OK** to confirm.

UNIT 4

WORKING WITH GRAPHICS, CHARTS AND PRINTING

UNIT GOALS

After completing this course you will be able to:

- Create a chart using the new Excel 2013 commands.
- Make changes to a chart after you create it.
- Understand basic chart terminology.

SESSION 4: CHARTS

Charts are used make it easier to understand large quantities of data and the relationship between different series of data by displaying series of numeric data in a graphical format. When you create a chart in Excel you will first enter the data on a worksheet and then create the chart. Excel automatically links the data to the chart so that if data is altered, added or deleted, the chart will update accordingly.

Chart Terms

You should be familiar with chart terminology so you will know the name of the object you wish to modify/add, etc. A typical style of chart would have an X-axis (horizontal) and a Y-axis (vertical). Below is a chart with its main aspects labeled.



A few guidelines for creating charts:

- 1) Different chart types are suitable for displaying different data sets. For example, a pie chart only displays one series of data, and would therefore be unsuitable for trying to compare more than one data range.
- 2) Generally speaking, simpler is better. Cluttering a chart with unnecessary data or too many additional objects may dilute the message you are trying to present with a chart.
- 3) You may need to consolidate some of your data in order to effectively present it in a chart. For example, you may want to present subtotals for your categories rather than plotting individual data items. Using the built-in subtotals feature of Excel (Data Tab, Subtotals) can often be useful in summarizing the data before plotting it.
- 4) Charts may be created in Excel and then pasted into other applications such as PowerPoint or Word. By default, the chart is pasted as a link so that if the data changes in Excel, the chart's view will update in any other application where it was pasted.

Types of Charts

Below are some general guidelines for selecting the best type of chart for the data you wish to present.

Column:	Shows data changes over a period of time or illustrates comparisons among
	items
Line:	Shows trends in data at equal intervals
Pie:	Shows proportional size of items that make up a data series; only shows 1
	data series
Bar:	Illustrates comparisons among individual items
Area:	Emphasizes the magnitude of change over time
XY (scatter):	Shows relationships among numeric values in several data series or plots two
	groups of numbers as one series of XY coordinates.
Stock:	Measures volume and has two axes; one for measuring volume, the other for
	stock prices
Surface:	Shows optimum combinations between two sets of data (like a topographic
	map)
Doughnut:	Shows the relationships of parts to a whole, like a pie, but can contain >1
	data series
Bubble:	Type of scatter chart: compares 3 sets of values with the 3 rd displayed as a
	size of a bubble
Radar;	Each category has its own value axis radiating from the center point

Cone, cylinder	Creates the specified effects by using shaped data markers in 3-D column
& pyramid ;	and bar charts

Create a Chart Creating a Chart

- 1. Select the cells that contain the data and text you want to include in the chart.
- 2. Select both the numeric data and adjacent row and column headings.
- 3. Make sure there are no blank rows or columns between the title and category headings and the body of the data or Excel will plot the blank spaces.
- 4. Navigate to the Insert tab, Charts group, and select a chart type from the Ribbon.

Note: You will see several options for chart types, and then options for each chart type. You are able to preview the charts by clicking on a chart type, and highlighting over the options under a column chart for example. Excel will show you a live Preview of the chart.





Sizing, Moving, and Deleting a Chart

To size the chart, drag the sizing handles until the chart reaches the desired size.



To move the chart within the same worksheet, simply click on the chart until your cursor turns into a plus sign with 4 arrows. Now click hold and drag the chart to a new location.

To move the chart to another sheet

- 1. Select the chart,
- 2. choose Cut,
- 3. Go to the new location, position the cursor
- 4. Choose Paste.

Alternatively

You may also

- 1. click on the chart,
- 2. Navigate to the Chart Tools Design Tab
- 3. Then select the Move Chart icon.

You will have the option to move the chart to a new worksheet which you can name, or to move it into a current worksheet.

Deleting a chart

To delete a chart,

- 1. Click on it to select it,
- 2. Press the Delete key on your keyboard.

Selecting Data

If you don't have your data selected prior to selecting your chart type, or if you had the wrong data selected, you can always change your data by right click the mouse on the chart and choose Select Data from the context sensitive menu.

From the Select Data Source window, make sure your cursor is in the Chart data range text box, now navigate your mouse back to the

worksheet holding your data. Now click hold and drag your cursor to select the data that you want to be displayed in your chart. When you have the correct data, hit the OK Button.

Select Data Source	? ×				
Chart data range = 'Column chart'!SAS1:SES10					
Switch R	tow/Column				
Legend Entries (Series)	Horizontal (Category) Axis Labels				
Add <u>Edit</u> <u>Remove</u>	Edi <u>t</u>				
Freshman	Agricultural Sciences				
Sophomore Sophomore	Applied Human Sciences				
Junior	Business				
Senior Senior	Engineering				
	Intra-University 👻				
Hidden and Empty Cells	OK Cancel				

CHART TOOLS					
		Switch Row/ Column Data	Select Data	Change Chart Type Type	Move Chart Location
Move Chart Choose where you war	nt the chart to be	placed:		?	
New	sheet: Chart1				
	ect in: Colum	n chart			J
			ОК	Car	ncel



Select Data. dh Move Chart...



You may also change your data from the Chart Tools Design Tab, and then clicking on the Select Data icon.

Recommended Charts

New in Excel 2013 is a feature called Recommended Charts. Recommended charts will look at your data and provide some recommendations for chart types to display your data.

To use Recommended Charts,

- 1. Select the data that you want to display,
- 2. Click on the Insert Tab,
- 3. Then select Recommended Charts.



The Insert Chart window appears with the recommendations for your data. You are able to click on any of the options on the left hand side and see a preview. If you find a chart that you want, either double click on it or select it and hit the OK button.

Notice that there are a few options available to you, but it doesn't necessarily mean that these are going to be the correct chart for your data. If you don't see an option that works, you can always click on the All Charts tab to pick the specific chart type that you would like to display



From the All Charts tab, you are able to see all of the charts that are available, the different options for each type and a Preview. Once you have found the chart type that you like, either double click on it, or select it and hit the OK button. The chart will now be displayed in your worksheet.



Changing the Chart Type

When you create your chart and it does not display the information as you thought it may, simply select the chart and click on the Change Chart Type icon from the Design tab. This will bring up the All Charts tab which will allow you to see every chart available. You will also have the Recommended Charts tab that you can use to Preview the options that Excel provides to you. When you have found a chart that you like, double click on it or select it and hit the OK button.



Formatting Chart Elements

Before you can select and modify any chart item, the chart must be activated. Click on a chart to select it. You will see "selection" handles added to the border indicating it is active. After activating the chart, you can move, modify, and size various elements of your chart such as titles, data labels, and pie and doughnut slices by selecting and dragging them. You can move and resize the plot area, the legend, and any graphic objects, such as text boxes and arrows that you have created by clicking on the piece and dragging, resizing, etc.



When the chart is active, you will see 3 icons on the upper right side of the chart.

	(+)
	10
	1
	2
	-

Chart Elements: Add, remove, or change chart elements such as title, legend, and gridlines

Chart Style: Set a style and color scheme

Chart Filter: Edit what data points and names are available on your chart

Chart Elements

Chart Elements will allow you to add, change, or remove chart elements. You can easily change the look of your chart by selecting, or deselecting any Element from the Chart Elements window. CHART ELEMENTS

Axes
Axis Titles
Chart Title
Data Labels
Data Table
Error Bars
Gridlines
Legend
Trendline

Some the elements will have more options for their location on the chart. Any time you see a grey right arrow, you will have more options for the elements.



Remember: You are still able to move the Elements on the chart if you don't like the exact locations of where they are located.

Note: These options are also available on the Chart Tools Design tab, under the Add Chart Element icon.



Chart Elements Options

Some Elements will have a More Options... option. This option will allow for formatting of the Box that the element is in as well as the text in the element.



The options that are available are dependent on which element you have selected the More Options option from. This is a good way to change the look of your chart elements.

Chart Style

The Chart Style will show you a few options of prebuilt Styles within Excel. You are able to click on any of the options to see a live change of your chart. If you do change the styles, you can always go back into the Filter option to change your chart back or to a new look.

The color option will allow you to change the colors of the chart. You are able to preview how they will look on the chart by clicking on the color options.

Note: Style and Color are both separate but can be used in conjunction with each other or on their own.



Note: These options are also available on the Chart Tools Design Tab.



Chart Filters

The chart filter will allow you to filter the data within your chart by selecting various Series or Category labels. To change the look of the chart,

- 1. Click the Apply button on the bottom of the Filter window.
- 2. To get your chart back to the original look,
- 3. Click on the Select all check box to display all data.







Chart Themes

An easy way to format your chart is to use the built in themes from Excel. These are the same themes that are used in PowerPoint and Word.

To change the theme,

- 1. Click on the Page Layout tab,
- 2. Then select the Themes dropdown.

You will have several theme options that are available to use. You are able to mouse over the name of the theme and see how your chart will change before actually selecting the theme.



You may also use your own color selections by clicking on the Format tab under Chart Tools. If you change the color and text via the Chart Tools Format tab, you will

Charts2013 - Excel	CHART TOOLS	()	
FORMULAS DATA REVIEW VIEW DEVELOPER	DESIGN FORMAT		
Abc Abc Abc Abc Abc Abc Abc	A Shape Fill → ✓ Shape Outline → ✓ Shape Effects →		Bring Forward - Re Align - Send Backward - E Group - Selection Pane A Rotate -
			1

have to select each element individually.

Chart Quick Layouts

Once you have created a chart, Excel has created some prebuilt Chart Layouts that may be useful. These options are available on the Chart Tools Design tab, under the Quick Layouts icon. There will be several options depending on the type of chart you are using. This is a quick and easy way to develop a chart with the information that you want to show.

You are able to see a live preview of any of the Layouts by moving your mouse over a particular layout.

To select a layout to use on your chart, just click on the one that you want and your chart will be updated. If there are some elements on the chart that you don't want, you can easily delete them or add in new elements.

Changing the Data Series Order

You can change the order in which the series are plotted for data series within the same chart type group (other than radar charts).

From the Chart Tools Design tab,

1. Choose the Select Data icon.



Select Data Source	? ×
Chart data range: ='Column chart'!SA51:SE510	
E Switch R	ow/Column
V Freshman	Agricultural Sciences
Sophomore Sophomore	Applied Human Sciences
Junior	Business
Senior	Engineering
	Intra-University +
Hidden and Empty Cells	OK Cancel

2. Specify the order you want the series to be in by clicking on a series name and using the arrow buttons to move the series name up or down.

Format a Data Series

When a data series is selected in the chart, you can right-click the mouse to adjust the Data Series.

The following context sensitive menu appears:

Format Data Series				
SERIES OPTIONS ▼				
🖏 💭 🏥				
▷ FILL				
BORDER				

On the top of the context sensitive menu, you can change the fill and/or outline of the data series. To get more options,

1. Select the Format Data Series...option on the bottom.



2. From the format Data Series option,

3. You can also adjust the Fill and border, as well as adding a drop shadow, adding a 3-D effect, etc.

Changing Chart Text

When you create a chart, the data labels, legend entries, and axis tick-mark labels are created from and automatically linked to the worksheet selection the chart is based on. It is usually easiest to make changes to this text by editing cells on the worksheet. You can edit data labels directly in the chart, although this breaks the automatic link.

If you have added a chart title, axis titles, or text boxes ("floating text") to your chart, you can select this text and type new text to replace it, or place the insertion point and edit it directly in the chart. Vertically aligned text is displayed horizontally until you are finished editing it.

Plotting Nonadjacent Selections

- 1. Sometimes the data you wish to plot are in rows or columns that are not adjacent to each other. To select and chart nonadjacent selections, begin by
- 2. Selecting the cells in the first row or column.
- 3. Hold down the Ctrl key as you select nonadjacent areas.
- 4. When you have all of the data selected that you want in your chart,
- 5. Go to the Insert Tab and select the type of chart that you want to display.

	Freshmen	Sophomore	Junior	Senior
Agricultural Sciences	27-	Make cole	ation ~4	447
Applied Human Sciences	1		cuon -	1,352
Business	400	471	597	686
Engineering	613	Prossa	and 337	693
Intra-University	1,784	hold Ctrl	while	58
Liberal Arts	800	selecting	this 248	1,669
Natural Sciences	902	cloum	, in 785	1,056
Veterinary Med & Biomedical Science	123	129	166	237
Warner College of Natural Sciences	212	286	348	512

Inserting Shapes and Clip Art

To insert shapes into your chart,

- 1. Click on the Chart Tools Format tab. On the right hand side, you will see a selection of shapes.
- 2. Click on the dropdown menu to see all of the shapes that are available.
- 3. You can use the Shape Styles to change the look of your shape either before you insert your shape, or by selecting it after it is inserted and changing the look.

÷ =		Cł	arts2013 - E	Excel			CHART TOOLS
ISERT	PAGE LAYOUT	FORMULAS	DATA	REVIEW	VIEW	DEVELOPER	DESIGN FORMAT
	Change	Abc Abc	Abc	Abc	Abc	Abc	- 2 Shape Fill ▼ Abc ▼ 2 Shape Outline ▼ ▼ Q Shape Effects ▼
Ir	nsert Shapes			<	Shape Style	15	r.

Copying a Chart into Microsoft Word

Once you have created your chart, you may need to share it in a report that you have created in Microsoft Word. To do this,

- 1. Make sure you have your Word Document open.
- 2. Go back into Excel and make sure you have the chart selected.
- 3. Copy the chart to the clipboard by clicking Ctrl-C.
- 4. Now, navigate to your open Word Document and simply press Ctrl-V.

By default, the copied chart is linked back to the Excel worksheet. What this means is that any changes you make to the data in Excel, will be reflected on the chart in your Word Document. If you do not want the chart to change based on the data in Excel. After you have pasted your

chart, in the lower right hand corner, you will see an icon with a clipboard and Ctrl. If you click on the Ctrl icon, you have the option to select different paste options. Click on the last icon, the Picture icon. This will paste a picture of your chart as it looks right now.





Printing Workbooks

Introduction

There may be times when you want to **print a workbook** to view and share your data **offline**. Once you've chosen your **page layout** settings, it's easy to preview and print a workbook from Excel using the **Print** pane.

To access the Print pane:

1. Select the File tab. Backstage view will appear.





2. Select **Print**. The **Print** pane will appear.

Click the buttons in the interactive below to learn more about using the Print pane.

\sim	Bulls Softball Team Roster - Excel	? – 🗆 ×
¢	Print	Javier Flores 👻 🕍
Info	Casian 1 A	
New		_
Open	Print	
Save	Printer ©	
Save As	Ready	i h harrie
Print	Printer Properties	Local Model Model <th< th=""></th<>
Share	Settings	
Export	Print Active Sheets Only print the active sheets	Des Defen Defen <thdefen< th=""> De</thdefen<>
Close	Pages: to prove to prove the stand to the s	
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Account	Collated 1,2,3 1,2,3 1,2,3	
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	Letter 8.5"×11"	
	Normal Margins Left: 0.7" Right: 0.7"	
	No Scaling Print sheets at their actual size	v
	Page Setup 4 1 d	16 🕨 🔲 🖸

To Print a Workbook:

- 1. Navigate to the **Print** pane, then select the desired **printer**.
- 2. Enter the number of **copies** you wish to print.
- 3. Select any additional settings if needed (see above interactive).
- 4. Click Print.



Choosing a Print Area

Before you print an Excel workbook, it's important to decide exactly what information you want to print. For example, if you have multiple worksheets in your workbook, you will need to decide if you want to print the **entire workbook** or only **active worksheets**. There may also be times when you want to print only a **selection** of content from your workbook.

To Print Active Sheets:

Worksheets are considered active when selected.

1. Select the **worksheet** you want to print. To print **multiple worksheets**, click the first worksheet, hold the **Ctrl** key on your keyboard, then click any other worksheets you want to select.



- 2. Navigate to the **Print** pane.
- 3. Select **Print Active Sheets** from the **Print Range** drop-down menu.

	Settings	
	Print Active Sheets Only print the active sheets	
	Print Active Sheets Only print the active sheets	
	Print Entire Workbook Print the entire workbook	
	Print Selection Only print the current selection	
		Print
		Copies: 1
4.	Click the Print button.	Print

To Print the Entire Workbook:

- 1. Navigate to the **Print** pane.
- 2. Select **Print Entire Workbook** from the **Print Range** drop-down menu.

	Setti	ngs			
		Print Entire Workbook Print the entire workbook	-		
		Print Active Sheets Only print the active sheets			
		Print Entire Workbook Print the entire workbook			
		Print Selection Only print the current select	tion		
				D · ·	
				Print	
				e	Copies: 1
3.	Clic	k the Print b	utton.	Print	

To Print a Selection:

1. Select the **cells** you want to print.

1	Team	Opponent	Day	Date	Time
2	Bears	Jets	Friday	Monday, June 17, 2013	6:00 PM
3	Bears	Cavaliers	Saturday	Tuesday, August 13, 2013	2:00 PM
4	Bears	Colts	Saturday	Tuesday, June 25, 2013	2:00 PM
5	Bears	Giants	Saturday	Tuesday, July 09, 2013	2:00 PM
6	Bears	Marlins	Saturday	Tuesday, July 02, 2013	2:00 PM
7	Bears	Bulls	Saturday	Tuesday, July 16, 2013	10:00 AM
8	Bears	Eagles	Saturday	Tuesday, July 23, 2013	🗘 10:00 AM
9	Bears	Hawks	Saturday	Tuesday, August 20, 2013	10:00 AM
10	Bears	Lightning	Saturday	Tuesday, August 06, 2013	10:00 AM

2. Navigate to the **Print** pane.

3. Select **Print Selection** from the **Print Range** drop-down menu.



4. A **preview** of your selection will appear in the **Preview** pane.

Saturday Saturday Saturday	Saturday, July 02, 2 Saturday, July 16, 2
Saturday Saturday	Saturday, July 16, 2
Saturday	
	Saturday, July 23, 2
Print	
	onies: 1
	opies: 1 👻
	Print

5. Click the **Print** button to print the selection.

If you prefer, you can also set the **print area** in advance so you'll be able to visualize which cells will be printed as you work in Excel. Simply **select** the cells you want to print, click the **Page Layout** tab, select the **Print Area** command, then choose **Set Print Area**.

F	ILE HOME	INSERT	PAGE LAYOUT F	ORMULAS DATA REVIEV	N VIEW DESIGN
The	Colors * M Fonts * * * * * * * * * * * * * *	Margins Orier	htation Size Print Pac fx First	Breaks Background Print Breaks Background Print Titles Set Print Area	Kapi Width: Automatic ▼ Gri Leight: Automatic ▼ Scale: 100% ↓
	Α	В	С	D	E
6	First Name	Last	Cell Phone	Street Address	Position(s)
7	Amanda	Ryan	513-555-4477	800 Round Table Drive	Pitcher, Second base
8	Tricia	Matthews	808-555-6397	4721 Arron Smith Drive	Catcher
9	Josefina	Woodard	714-555-4506	2152 Liberty Avenue	Outfield
10	Rodney	Ross	310-555-8862	3503 Prospect Valley Roa	d First base
11	Leigh	Dizon	607-555-7816	1483 Frosty Lane	Third base
12	Mark	Grant	914-555-5592	1663 Taylor Street	Shortstop
13	Mildred	Persinger	601-555-0175	3329 Washington Avenue	First base, pitcher
14	Dwayne	Patnode	205-555-3783	1736 Broad Street	DH
15	Bonnie	Benjamin	502-555-1212	2937 Earnhardt Drive	Second base
16	Eva	Ramer	805-555-8514	232 Timber Oak Drive	Right field
17	Carol	Pena	571-555-0704	4072 Nelm Street	Third Base
18	Leola	McNew	580-555-8177	2182 Cody Ridge Road	Pitcher
19	Annie	Muro	502-555-0190	1001 Cerullo Road	Second base
20	Joe	Rodriguez	781-555-9659	9 Tenmile Road	Third base
21	Josephine	Carter	713-555-6401	1386 Patterson Street	Outfield, catcher

Fitting and Scaling Content

On occasion, you may need to make **small adjustments** from the Print pane to fit your workbook content neatly onto a printed page. The Print pane includes several tools to help fit and scale your content, such as **scaling** and **page margins**.

To fit content before printing:

If some of your content is being cut off by the printer, you can use **scaling** to fit your workbook to the page automatically.

1. Navigate to the **Print** pane. In our example, we can see in the Preview pane that our content will be cut off when printed.

		Bulls Team 1	
First Name	Last	Cell Phone	
Amanda	Ryan	513-555-4477	
Tricia	Matthews	808-555-6397	
Josefina	Woodard	714-555-4506	
Rodney	Ross	310-555-8862	
Leigh	Dizon	607-555-7816	
Mark	Grant	914-555-5592	
Mildred	Persinger	601-555-0175	
Dwayne	Patnode	205-555-3783	
Bonnie	Benjamin	502-555-1212	
Eva	Ramer	805-555-8514	
Carol	Pena	571-555-0704	
Leola	McNew	580-555-8177	
Annie	Muro	502-555-0190	
Joe	Rodriguez	781-555-9659	
Josephine	Carter	713-555-6401	
Nicole	Waugh	707-555-8767	
Anthony	Keel	267-555-0144	
Sally	Smith	571-555-9432	
Joshua	Milliman	213-555-1117	
Ray	Logan	256-555-2475	
Carla	Ramirez	573-555-1107	
Billy	Sanchez	205-555-6874	

2. Select the desired option from the **Scaling** drop-down menu. In our example, we'll select **Fit Sheet on One Page**.



3. The worksheet will be **condensed** to fit onto a single page.

-	•	Ŧ	Ŧ	T	Ŧ	-		
	S	\langle	Bulls Te an	n Roster: Co-ed Soffball 2013	\gg			
	First Name	Last	Cell Phone	Street Address	Position(s)			
	Amanda	Ryan	513-555-4477	800 Round Table Drive	Pitcher, Second base			
	Tricia	Matthews	808-555-6397	4721 Arron Smith Drive	Catcher			
	Josefina	Woodard	714-555-4506	2152 Liberty Avenue	Outfield			
	Rodney	Ross	310-555-8862	3508 Prospect Valley Road	First base			
	Leigh	Dizon	607-555-7816	1485 Frosty Lane	Third base			
	Midned	Dessinger	914-55 5-0 392 601-55 5-0 175	3329 Workington Avenue	East have nitcher			
	Deserver	Patrode	205-555-3783	1736 Broad Street	DH			
	Bonnie	Benjamin	502-555-1212	2987 Earnhardt Drive	Second base			
	Eva	Ramer	805-555-8514	2.32 Timber Oak Drive	Right field			
	Carol	Pena	571-555-0704	4072 Nelm Street	Third Base			
	Leda	McNew	580-555-8177	2182 Cody Ridge Road	Pitcher			
	Annie	Muro	502-555-0190	1001 Cerulio Road	Second base			
	Joe	Rodriguez	781-555-9659	9 Tenmile Road	Third base			
	Nicole	Water	713-333-0401	3000 Patterson street	Lafe Sald			
	Anthony	Keel	267-555-0144	533 Sprine Avenue	Shortstop, pinch runner			
	Sally	Smith	571-555-9432	2723 Nelm Street	Left field, Center field			
	Joshua	Milliman	213-555-1117	2166 Zmmerman Lane	Pitcher, DH			
	Ray	Logan	256-555-2475	2.439 Ritter Street	CenterField			
	Carla	Ramirez	573-555-1107	4858 Penn Street	First base, Third base			
	Billy	Sanchez	205-555-6874	569 Strother Street	Pitcher, Outfield	_		
	Neil	Crawford	908-555-2254	2512 Stonepot Road	Left Field			
	Kobert	Murray	279-222-4028	740 prookside Drive	Manager			
-								
							Print	
							Print	Copies: 1
Whe	en yo	u're s	satisfie	d with the	scaling, clic	k Print.	- P	

Keep in mind that worksheets will become more **difficult to read** as they are scaled down, so you may not want to use this option when printing a worksheet with a lot of information.

To modify margins in the Preview pane:

Sometimes you may only need to adjust a **single margin** to make your data fit more comfortably. You can modify individual page margins from the **Preview** pane.

1. Navigate to the **Print** pane, then click the **Show Margins** button in the lower-right corner.

Show Margins

2. The **page margins** will appear in the **Preview** pane. Hover the mouse over one of the **margin markers** ■until the cursor becomes a **double arrow** . In our example, we'll modify the **left margin** to fit an additional column on the page.

.∔•	T	T	T
Team	Opponent	Day	Date
Bears	Jets	Friday	Friday, June 17, 2011
Bears	Cavaliers	Saturday	Saturday, August 13, 2011
Bears	Colts	Saturday	Saturday, June 25, 2011
Bears	Giants	Saturday	Saturday, July 09, 2011
Bears	Marlins	Saturday	Saturday, July 02, 2011
Bears	Bulls	Saturday	Saturday, July 16, 2011
Bears	Eagles	Saturday	Saturday, July 23, 2011
Bears	Hawks	Saturday	Saturday, August 20, 2011

3. Click, hold, and drag the mouse to increase or decrease the margin width.

- + +	_	T	T	1
	Team	Opponent	Day	Date
	Bears	Jets	Friday	Friday, June 17, 2011
	Bears	Cavaliers	Saturday	Saturday, August 13, 2011
	Bears	Colts	Saturday	Saturday, June 25, 2011
	Bears	Giants	Saturday	Saturday, July 09, 2011
	Bears	Marlins	Saturday	Saturday, July 02, 2011
	Bears	Bulls	Saturday	Saturday, July 16, 2011
	Bears	Eagles	Saturday	Saturday, July 23, 2011
	Bears	Hawks	Saturday	Saturday, August 20, 2011

4. Release the mouse. The margin will be modified. In our example, we were able to fit an additional column on the page.

	T	T	Ŧ	
Team	Opponent	Dav	Date	Time
Bears	Jets	Friday	Friday, June 17, 2011	6:00 PM
Bears	Cavaliers	Saturday	Saturday, August 13, 2011	2:00 PM
Bears	Colts	Saturday	Saturday, June 25, 2011	2:00 PM
Bears	Giants	Saturday	Saturday, July 09, 2011	2:00 PM
Bears	Marlins	Saturday	Saturday, July 02, 2011	2:00 PM
Bears	Bulls	Saturday	Saturday, July 16, 2011	10:00 AM
Bears	Eagles	Saturday	Saturday, July 23, 2011	10:00 AM
D	Henrylee	Casto condition	Patriaday, Assault 20, 2011	10.00 AM

QUESTIONS

- 1. What are the Versions of Microsoft Excel that exist
- 2. How is Microsoft Excel Launched
- 3. Define Spreadsheet and State the Benefits of it
- 4. What is the procedure for displaying the formula bar in Microsoft Excel
- 5. If the current "Active Cell" is A65 and you want to jump to another cell, K13, what is the procedure for doing this?
- 6. The status bar in Microsoft Excel can either be turned on or off. Outline the procedure for turning the status bar ON when it is OFF.
- 7. What is a cell
- 8. Distinguish Active cell from Inactive cell
- 9. Define the cell address D15
- 10. What is a range
- 11. What is the function of smart tags in Microsoft Excel
- 12. What is the procedure for adjusting column widths in Microsoft Excel
- 13. Outline the procedure for freezing and unfreezing rows and columns in Microsoft Excel
- 14. What is a formula
- 15. Define the following terminologies
 - Lookup
 - VLookup
 - Len
 - Concatenate

16. How is the currency symbol applied to numbers in Microsoft Excel
UNIT 5

MICROSOFT POWERPOINT

By the end of this course, the reader will be able to:

- 1. Create a presentation and add slides in various layouts
- 2. Insert and format various media onto slides including text, images, video, and tables, etc.
- 3. Insert animations and slide transitions
- 4. Create hyperlinks to existing files like word document, excel workbook, website, etc.
- 5. Convert Presentation to other file formats
- 6. Save and print a presentation in various formats
- 7. Set-up and present a slideshow

Introduction

PowerPoint 2013 is a presentation software that allows you to create dynamic slide presentations. Presentations, can include animation, narration, images, videos, and much more. Microsoft PowerPoint 2013 gives you more ways to create and share dynamic presentations with your audience than ever before. Exciting new audio and visual capabilities help you tell a crisp, cinematic story that's as easy to create as it is powerful to watch. New features in PowerPoint 2013 include the new wide-screen theme, easier view zooming and slide management, inserting and tracking of comments, hyperlinking and creating web pages with PowerPoint. Also with PowerPoint 2013, you can add fades, formatting effects, bookmark scenes, and trim videos to give your presentations a professional multimedia experience.

Opening PowerPoint 2013

When you open PowerPoint 2013 for the first time, the **Start Screen** will appear. From here, you will be able to create a **new presentation**, choose a **template**, or access your **recently edited presentations**.

- 1. From the Start Screen, locate and select Blank Presentation.
- 2. A new presentation will appear.

Getting to know PowerPoint 2013

PowerPoint 2013 is similar to PowerPoint 2010. If you have previously used PowerPoint 2010, PowerPoint 2013 should feel familiar. But if you are new to PowerPoint or have more experience with older versions, you should first take some time to become familiar with the PowerPoint 2013 interface.

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FILE HOME INSERT DESIGN TR	INSITIONS ANIMATIONS SLIDE SHOW REVIEW VIEW	Sign in 🚨
Paste v ♥ Slidev ● Section v	▲ ▲ ▲ ▲ ▲ ▲ □ □ □ □ □ △ Shape Fill × ▲ ▲ ▲ □ □ □ □ □ △ Shape Fill × ▲ ▲ ■ ■ □ □ □ △ Shape Outline × Shape All × ■ ■ ■ □ □ Shape Outline × Shape Stringe □ □ □ □ □ Shape Effects ×	a∰a Find abc Replace ▼ I≳ Select ▼
Clipboard 🗔 Slides	Font I Paragraph I Drawing I	Editing 🔺
	Click to add title	4
	Click to add text	
3		
SLIDE 3 OF 3 DB	≜ NOTES ■ COMMENTS ■ ■ ■ ■ ■ =	÷ → + 46% 🗗

Working with the PowerPoint environment

If you have previously used PowerPoint 2010 or 2007, PowerPoint 2013 will feel familiar. It continues to use features like the **Ribbon** and the **Quick Access toolbar**, where you will find commands to perform common tasks in PowerPoint, as well as **Backstage view**.

The Ribbon

PowerPoint 2013 uses a **tabbed Ribbon system** instead of traditional menus. **The Ribbon** contains **multiple tabs**, each with several **groups of commands**. You will use these tabs to perform the most **common tasks** in PowerPoint.



Exploring the Ribbon

You would need to move between tabs to perform common tasks in PowerPoint. Knowing where to find the right command will make PowerPoint easier to use.

The Home Tab							
Presentation1 - PowerPoint TABLE TOOLS							
FILE HOME INSERT	DESIGN TRANSITIONS AI	NIMATIONS SLIDE SHOW	REVIEW VIEW	DESIGN LAYOUT			
Paste ▼ ◆ ◆ Slide ▼ ● ▼	Calibri (Body) ▼ 18 ▼ A A B I U S abe AV ▼ Aa ▼	· │ � │ ⊟ • ⊟ • ∉ ∉ ▲ • │ ☰ = = = = ≡	t≡ - IIA - t⊕ - The the test of test) Control Cont			
Clipboard 🕞 Slides	Font	ra Paragraph	F2	Drawing 🖓			

The **Home** tab gives you access to the most commonly used commands, including **copy and paste**, **formatting**, and the **New Slide** command. The Home tab is selected by default whenever you open PowerPoint.

The Insert Tab

Presentation1 - PowerPoint TABLE TOOLS								OLS				
FILE	HOM	E INSERT	DESIGN	TRANSITIONS	ANIMATIONS	S SLI	DE SHOW	REVIEW	VIEW	DESIG	N	LAYOUT
¥ New Slide ▼	Table	Pictures	Online Pictur Screenshot - Photo Album	es 🐼 Shape T Smart	Art Apps for Office *	Links	Comment	A Text Box	Header & Footer	A WordArt	₩ ₩	Ω Symbols *
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The **Insert** tab allows you to insert **pictures**, **charts**, **tables**, **shapes**, **videos**, and more, which can help you communicate information **visually** and add **style** to your presentation.



You can apply **themes** from the Design tab. A theme is a **predefined combination** of colors, fonts, and effects that can quickly change the look and feel of your entire slide show. Different themes also include different **slide layouts**.

The Transitions Tab



You can apply slide transitions from the **Transitions** tab. Transitions are the movements you see between slides when presenting your slide show.

Animations Tab



The **Animations** tab allows you to **animate** text and objects such as clip art, shapes, and pictures. Animations can be used to draw attention to specific content or make the slide easier to read.

The Slide Show Tab



When you are ready to present your slide show, the **Slide Show** tab gives you tools to make your presentation smooth and professional, including the option to **rehearse timings** and **record narration**.

The Review Tab P3 🔒 5- $^{\circ}$ <u>t</u>⊚ ≑ Presentation1 - PowerPoint TABLE TOOLS HOME INSERT DESIGN TRANSITIONS ΔΝΙΜΔΤΙΟΝS SLIDE SHOW REVIEW VIEW DESIGN LAYOUT ABC Compare Previous aa Translate ™ Accept 🖽 Language 🕯 Next Spelling Research Thesaurus Delete New Previous Next Show En Reviewing Pane Revi 🕺 Reject 🔻 Comment Comments * Proofing Language Comments Compare

You can use the **Review** tab to access PowerPoint's powerful **editing features**, including **spell check** and **comments**. These features make it easy to **review** and **collaborate** on presentations.

The View Tab								
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Presentation Views	Master Views	Show	E.	Zoom	n		Win	dow

The **View** tab allows you to switch between several different views for your presentation, including **Outline View**, **Slide Sorter**, and **Slide Master**. These views can help you **prepare** and **organize** your slide show.

Contextual Tabs

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Contextual tabs will appear on the Ribbon when working with certain items like **tables**, **shapes**, and **pictures**. These tabs contain special command groups that can help you format these items as needed.

To Minimize and Maximize the Ribbon:

The Ribbon is designed to respond to your current task, but you can choose to **minimize** it if you find that it takes up too much screen space.

1. Click the **Ribbon Display Options** arrow in the upper-right corner of the Ribbon.



- 2. Select the desired **minimizing option** from the drop-down menu:
 - **Auto-hide Ribbon:** Auto-hide displays PowerPoint in full-screen mode and completely hides the Ribbon. To **show the Ribbon**, click the **Expand Ribbon** command at the top of screen.

- **Show Tabs:** This option hides all command groups when not in use, but **tabs** will remain visible. To **show the Ribbon**, simply click a tab.
- Show Tabs and Commands: This option maximizes the Ribbon. All of the tabs and commands will be visible. This option is selected by default when you open PowerPoint for the first time.

The Quick Access toolbar

Located just above the Ribbon, the **Quick Access toolbar** lets you access common commands no matter which tab is selected. By default, it includes the **Save**, **Undo**, **Repeat**, and **Start Presentation** commands. You can add other commands depending on your preference.

To add commands to the Quick Access toolbar:

- 1. Click the **drop-down arrow** to the right of the **Quick Access toolbar**.
- 2. Select the **command** you wish to add from the drop-down menu. To choose from more commands, select **More Commands**.



3. The command will be added to the Quick Access toolbar.



The Ruler, Guides, and Gridlines

PowerPoint includes several tools to help organize and arrange content on your slides, including the **Ruler**, **Guides**, and **Gridlines**. These tools make it easier to **align objects** on

your slides. Simply click the **check boxes** in the **Show** group on the **View** tab to show and hide these tools.

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The Backstage View

Backstage view gives you various options for saving, opening, printing, and sharing your presentations.

To access Backstage view:

- 1. Click the **File** tab on the **Ribbon**.
- 2. Backstage view will appear.

Navigate to Backstage view and open your Account settings.





Creating and Opening Presentations Introduction PowerPoint files are called presentations. Whenever you start a new project in PowerPoint, you will need to create a new presentation, which can either be blank or from a template. You'll also need to know how to open an existing presentation.

To Create a New Presentation:

- 1. Select the **File** tab to go to **Backstage view**.
- 2. Select **New** on the left side of the window, then click **Blank Presentation** or choose a **theme**.
- 3. A new presentation will appear.

To open an existing presentation:

- 1. Select the **File** tab to go to **backstage view**.
- 2. Select Open.
- Select Computer, then click Browse. Alternatively, you can choose OneDrive (previously known as SkyDrive) to open files stored on your OneDrive.

Note: If you have opened the desired presentation recently, you can browse your **Recent Presentations** rather than searching for the file.





To Pin a Presentation:

If you frequently work with the **same presentation**, you can **pin it** to backstage view for easy access.

- 1. Select the **File** tab to go to **Backstage view**. Click **Open**. Your **Recent Presentations** will appear.
- Hover the mouse over the presentation you wish to pin. A pushpin icon [→] will appear next to the presentation. Click the pushpin icon.

Recent Presentations



Regional Sales Report My Documents » AdWorks



New Employee Orientation My Documents » AdWorks



3. The presentation will stay in Recent Presentations. To **unpin** a presentation, simply click the pushpin icon again.

You can also **pin folders** to Backstage view for easy access. From Backstage view, click **Open**, locate the **folder** you wish to pin, then click the **pushpin icon**.

Open		
Recent Presentations	Computer	
	Recent Folders	
Javier Flores's OneDrive	AdWorks My Documents » AdWorks	1
Computer	🧀 My Documents 🚔 Desktop	-
Add a Place		
	Browse	

Using Templates

A **template** is a **predesigned presentation** you can use to create a new slide show quickly. Templates often include **custom formatting** and **designs**, so they can save you a lot of time and effort when starting a new project.

To Create a New Presentation from a Template:

- 1. Click the File tab to access Backstage view.
- Select New. You can click a suggested search to find templates or use the search bar to find something more specific. In our example, we'll search for Business presentations.



3. Select a **template** to review it.



- 4. A **preview** of the template will appear, along with **additional information** on how the template can be used.
- 5. Click **Create** to use the selected template.
- 6. A new presentation will appear with the **selected template**.



Compatibility Mode

Sometimes you may need to work with presentations that were created in earlier versions of Microsoft PowerPoint, such as PowerPoint 2003 or PowerPoint 2000. When you open these kinds of presentations, they will appear in Compatibility mode.

Compatibility mode **disables** certain features, so you will only be able to access commands found in the program that was used to create the presentation. For example, if you open a presentation created in PowerPoint 2003, you can only use tabs and commands found in PowerPoint 2003.

In the image below, you can see that the presentation is in Compatibility mode. This will disable some PowerPoint 2013 features, such as newer types of slide transitions.

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In order to exit Compatibility mode, you will need to **convert** the presentation to the current version type. However, if you're collaborating with others who only have access to an earlier version of PowerPoint, it's best to leave the presentation in Compatibility mode so the format will not change.

You can review this **support page** from Microsoft to learn more about which features are disabled in Compatibility mode.

To Convert a Presentation:

If you want access to all PowerPoint 2013 features, you can **convert** the presentation to the 2013 file format.

- 1. Click the **File Tab** to access Backstage view.
- 2. Locate and select the **Export** command.



3. The **Save As** dialog box will appear. Select the **location** where you wish to save the presentation, enter a **file name**, and click **Save**.

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File name:	Gardening Presentation]	~
Save as type:	PowerPoint Presentation	~
Authors:	Add an author Tags: Add a tag	
) Hide Folders	Tools 🔻 Save Cancel	

4. The presentation will be converted to the newest file type.

Saving and Sharing

Introduction

Whenever you create a new presentation in PowerPoint, you will need to know how to **save** in order to access and edit it later. As in previous versions of PowerPoint, you can save files to your **computer**. If you prefer, you can also save files to **the cloud** using **OneDrive**. You can even **export** and **share** presentations directly from PowerPoint.

Save and Save As

PowerPoint offers two ways to save a file: **Save** and **Save As**. These options work in similar ways, with a few important differences:

- **Save**: When you create or edit a presentation, you will use the **Save** command to save your changes. You will use this command most of the time. When you save a file, you will only need to choose a file name and location the first time. After that, you can just click the Save command to save it with the same name and location.
- Save As: You will use this command to create a **copy** of a presentation while keeping the original. When you use Save As, you'll need to choose a different name and/or location for the copied version.

To Save a Presentation:

It's important to **save your presentation** whenever you start a new project or make changes to an existing one. Saving early and often can prevent your work from being lost. You'll also need to pay close attention to **where you save** the presentation so it will be easy to find later.

1. Locate and select the **Save** command on the **Quick Access Toolbar**.

- 2. If you are saving the file for the first time, the **Save As** pane will appear in **Backstage view**.
- 3. You will then need to choose **where to save** the file and give it a **file name**. To save the presentation to your computer, select **Computer**, then click **Browse**. Alternatively, you can click **OneDrive** to save the file to your OneDrive.



- 4. The **Save As** dialog box will appear. Select the **location** where you wish to save the presentation.
- 5. Enter a file name for the presentation, then click Save.

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📙 Downloads	New Employee Orientation 7/11/2013	10:17 AM Microsoft PowerP
E	Regional Sales Report 7/10/2013	4:02 PM Microsoft PowerP
Documents Documents Music Pictures	Choose a location and then enter a file name	
Videos	v c	>
File name:	client presentation	~
Save as type:	PowerPoint Presentation	~
Authors:	Add an author Tags: Add a tag	
Alide Folders	Tools 👻 S	ave Cancel

6. The presentation will be **saved**. You can click the **Save** command again to save your changes as you modify the presentation. *You can also access the* **Save** command by pressing **Ctrl+S** on your keyboard.

Using Save As to make a copy

If you want to save a **different version** of a presentation while keeping the original, you can create a **copy**. For example, if you have a file named **"Client Presentation"** you could save it as **"Client Presentation 2"** so you'll be able to edit the new file and still refer back to the original version.

To do this, you'll click the **Save As** command in Backstage view. Just like when saving a file for the first time, you'll need to choose **where to save** the file and give it a new **file name**.



To Change the Default Save Location:

If you don't want to use **OneDrive**, you may be frustrated that OneDrive is selected as the default location when saving. If you find it inconvenient to select **Computer** each time, you can change the **default save location** so **Computer** is selected by default.

- 1. Click the File tab to access Backstage view.
- 2. Click **Options**.
- The PowerPoint Options dialog box will appear. Select Save, check the box next to Save to Computer by default, then click OK. The default save location will be changed.

Share	
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	PowerPoint Options	?	×
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Customize Ribbon	Keep the last autosaved version if I close without saving		
Quick Access Toolbar	AutoRecover file location: C:\Users\AppData\Roaming\		
Add-Ins Trust Center	Don't show the Backstage when opening or saving files Show additional places for saving, even if sign-in may be required. Save to Computer by default		
	Default local file location: C:\Users\Documents\		
	Default personal templates location:]
	OK	Can	cel

AutoRecover

PowerPoint automatically saves your presentations to a temporary folder while you are working on them. If you forget to save your changes or if PowerPoint crashes, you can restore the file using **AutoRecover**.

To use AutoRecover:

- Open PowerPoint 2013. If autosaved versions of a file are found, the Document Recovery pane will appear.
- 2. Click to **open** an available file. The presentation will be recovered.



PowerPoint has recovered the following files. Save the ones you wish to keep.





By default, PowerPoint AutoSaves every 10 minutes. If you are editing a presentation for less than 10 minutes, PowerPoint may not create an AutoSaved version.

If you don't see the file you need, you can browse all AutoSaved files from **Backstage** view. Just select the **File** tab, click **Manage Versions**, then choose **Recover Unsaved Presentations**.



Exporting Presentations

By default, PowerPoint presentations are saved in the **.pptx** file type. However, there may be times when you need to use **another file type**, such as a **PDF** or **PowerPoint 97-2003 presentation**. It's easy to **export** your presentation from PowerPoint in a variety of file types:

- **PDF:** Saves the presentation as a **PDF document** instead of a PowerPoint file
- Video: Saves the presentation as a video
- **Package for CD:** Saves the presentation in a folder along with the Microsoft PowerPoint Viewer, a special slide show player anyone can download
- Handouts: Prints a handout version of your slides
- Other file type: Saves in other file types, including PNG and PowerPoint 97-2003

To Export a Presentation:

In our example, we'll save the presentation as a **PowerPoint 97-2003** file.

- 1. Click the File tab to access Backstage view.
- Click Export, then choose the desired option. In our example, we'll select Change File Type.
- 3. Select a **file type**, then click **Save As**.

nfo	Export			
New				
Open	Create PDF/XPS Document			
Save	Create a Video			
Save As	7			
Print	Package Presentation for CD			
Share				
Export				
Close	Change File Type			

Change File Type

Presentation File Types	
Presentation Uses the PowerPoint Presentation format	PowerPoint 97-2003 Presentation Uses the PowerPoint 97-2003 Presentation format
OpenDocument Presentation Uses the OpenDocument Presentation format	Template Starting point for rew presentations
PowerPoint Show Automatically opens as a slide show	PowerPoint Picture Presentation Presentation where each slide is a picture
Image File Types	
PNG Portable Network Graphics Print quality image files of each slide	JPEG File Interchan ye Format Web quality image files of each slide
Other File Types	
Save as Another File Type	
Save As	Choose a file type, then click Save As
Save As	

4. The **Save As** dialog box will appear. Select the **location** where you wish to export the presentation, type a **file name**, then click **Save**.

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Authors:	Javier Flores	Tags: A	add a tag	
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You can also use the **Save as type:** drop-down menu in the **Save As** dialog box to save presentations in a variety of file types. Be careful to choose a file type other people will be able to open.

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Sharing Presentations

PowerPoint 2013 makes it easy to **share and collaborate** on presentations using **OneDrive**. In the past, if you wanted to share a file with someone you could send it as an email attachment. While convenient, this system also creates **multiple versions** of the same file, which can be difficult to organize.

When you share a presentation from PowerPoint 2013, you're actually giving others access to the **exact same file**. This lets you and the people you share with **edit the same presentation** without having to keep track of multiple versions.

In order to share a presentation, it must first be saved to your OneDrive.

To Share a Presentation:

- 1. Click the File tab to access Backstage view, then click Share.
- 2. The **Share** pane will appear.

Click the buttons in the interactive below to learn more about different ways to share a presentation.



Share

Regional Sales Report Javier Flores's OneDrive » Documents Share Sa Invite People Get a Sharing Link 0 Post to Social Networks 🖳 Email Present Online Publish Slides

Invite People

Type names or e-mail addresses 💑 💷 Can edit 🔻 Include a personal message with the invitation

Require user to sign in before accessing document.





UNIT 6 SLIDE BASICS

Introduction

PowerPoint presentations are made up of a series of **slides**. Slides contain the information you will present to your audience. This might include **text**, **pictures**, **charts**, and more. Before you start creating presentations, you will need to know the basics of working with **slides** and **slide layouts**.

Understanding slides and slide layouts

When you insert a **new slide**, it will usually have **placeholders**. Placeholders can contain different types of content, including **text** and **images**. Some placeholders have **placeholder text**, which you can replace with your own text. Others have **thumbnail icons** that allow you to insert pictures, charts, and videos.



Slides have several different layouts for placeholders, depending on the kind of information you want to include. Whenever you create a new slide, you'll need to choose a slide layout that fits your content.



To Insert a New Slide:

Whenever you start a new presentation, it will contain **one slide** with the **Title Slide** layout. You can insert as many slides as you need from a variety of layouts.

1. From the **Home** tab, click the **bottom half** of the **New Slide** command.

2. Choose the desired **slide layout** from the menu that appears.

New Slide •	BIUS	- 24 - A A A A A A A A A A A A A A A A A A
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🛅 <u>R</u> euse Slides		

3. The new slide will appear. Click any **placeholder** and begin typing to add text. You can also click an **icon** to add other types of content, like a **picture** or a **chart**.

100 6 0010 5 0010 4 0010 3 0010 2 0010 1 0010 1 0010 2 0010 3 0010 4 0010 5 0010 6 001
Click to add title • Click to add text Click a placeholder or an icon

To change the layout of an existing slide, click the **Layout** command, then choose the desired layout.



To quickly add a slide that uses the same layout as the selected slide, simply click the top half of the New Slide command.



Organizing Slides

PowerPoint presentations can contain as many slides as you need. The **Slide Navigation pane** makes it easy to **organize** your slides. From there, you can **duplicate**, **rearrange**, and **delete** slides in your presentation.



Working with slides

- **Duplicate slides:** If you want to copy and paste a slide very quickly, you can **duplicate** it. To duplicate slides, select the slide you wish to **duplicate**, right-click the mouse, and choose **Duplicate Slide** from the menu that appears. You can also duplicate **multiple slides** at once by selecting them first.
- **Move slides:** It's easy to change the **order** of your slides. Just click, hold, and drag the **desired slide** in the Slide Navigation pane to the desired position.
- **Delete slides:** If you want to remove a slide from your presentation, you can **delete** it. Simply select the slide you wish to delete, then press the **Delete** or **Backspace** key on your keyboard.

To Copy and Paste Slides:

If you want to create several slides with the same layout, you may find it easier to **copy and paste** a slide you've already created rather than starting with an empty slide.

- 1. Select the **slide** you wish to copy in the Slide Navigation pane, then click the **Copy** command on the **Home** tab.
- 2. In the Slide Navigation pane, click just below a slide (or between two slides) to choose a paste location. A **horizontal insertion point** will appear.
- 3. Click the **Paste** command on the **Home** tab.

4. The slide will appear in the selected location.

Customizing Slides

To Change the Slide Size:

By default, all slides in PowerPoint 2013 use a **16 by 9**—or **widescreen**—aspect ratio. You might know that widescreen TVs also use the 16-by-9 aspect ratio. Widescreen slides will work best with widescreen monitors and projectors. However, if you need your presentation to fit a standard **4-by-3** screen, it's easy to change the slide size to fit.

• To change the slide size, select the **Design** tab, then click the **Slide Size** command. Choose the desired slide size from the menu that appears, or click **Custom Slide Size...** for more options.

DESIGN	TRANSITIONS	ANIMATIONS	SLIDE SHOW	REVIEW	VIEW	Javier Flores 👻 阕
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				vanants		Standard (4:3)
						Widescreen (16:9)
						<u>C</u> ustom Slide Size

To Format the Slide Background:

By default, all slides in your presentation use a **white background**. It's easy to change the background style for some or all of your slides. Backgrounds can have a **solid**, **gradient**, **pattern**, or **picture** fill.

1. Select the **Design** tab, then click the **Format Background** command.



- 2. The **Format Background** pane will appear on the right. Select the desired fill options. In our example, we'll use a **Solid fill** with a **light gold** color.
- 3. The background style of the selected slide will update.
- 4. If desired, you can click **Apply to All** to apply the same background style to all slides in your presentation.



To Apply a Theme:

A theme is a predefined combination of colors, fonts, and effects that can quickly change the look and feel of your entire slide show. Different themes also use different slide layouts, which can change the arrangement of your existing placeholders. We'll talk more about themes later in our Applying Themes lesson.

1. Select the Design tab on the Ribbon, then click the More drop-down arrow to see all of the available themes.



2. Select the **desired theme**.

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	a	Aa	Aa	Aa	Aa	
A	a	Aa	Aa	Aa	Aa	
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	Enable Content Updates from <u>O</u> ffice.com					
Browse for Themes						
•	Save Currer	nt Theme				.:

3. The theme will be applied to your **entire presentation**.



Customizing Slide Layouts

Sometimes you may find that a slide layout doesn't exactly fit your needs. For example, a layout might have too many placeholders, or too few. You might also want to change how the placeholders are arranged on the slide. Fortunately, PowerPoint makes it easy to adjust slide layouts as needed.

Adjusting Placeholders

• **To select a placeholder:** Hover the mouse over the edge of the placeholder and click (you may need to click on the text in the placeholder first to see the border). A selected placeholder will have a **solid line** instead of a dotted line.

Shelbyfield Animal Rescue

• **To move a placeholder:** Select the placeholder, then click and drag it to the desired location.

Shelbyfield Animal Rescue



• To resize a placeholder: Select the placeholder you want to resize. Sizing handles will appear. Click and drag the sizing handles until the placeholder is the desired size. You can use the corner sizing handles to change the placeholder's height and width at the same time.

Shelbyfield Animal Rescue

• **To delete a placeholder:** Select the placeholder you wish to delete, then press the **Delete** or **Backspace** key on your keyboard.

To Add a Text Box:

Text can be inserted into both **placeholders** and **text boxes**. Inserting **text boxes** allows you to add to the slide layout. Unlike placeholders, text boxes always stay in the same place, even if you change the theme.

1. From the Insert tab, select the Text Box command.



2. Click, hold, and drag to draw the text box on the slide.



3. The text box will appear. To add text, simply click the text box and begin typing.



Using Blank Slides

If you want even more control over your content, you may prefer to use a **blank slide**, which contains no placeholders. Blank slides can be customized by adding your own text boxes, pictures, charts, and more.

• To insert a blank slide, click the bottom half of the **New Slide** command, then choose **Blank** from the menu that appears.



While blank slides offer more flexibility, keep in mind that you won't be able to take advantage of the predesigned layouts included in each theme.

To Play the Presentation:

Once you've arranged your slides, you may want to **play** your presentation. This is how you will present your slide show to an audience.

1. Click the **Start From Beginning** command on the Quick Access toolbar to see your presentation.



- 2. The presentation will appear in full-screen mode.
- 3. You can advance to the next slide by **clicking your mouse** or pressing the **space bar** on your keyboard. Alternatively, you can use the **arrow keys** on your keyboard to move forward or backward through the presentation.
- 4. Press the **Esc** key to exit presentation mode.

Note: You can also press the **F5** key at the top of your keyboard to start a presentation.

UNIT 7

TEXT BASICS

Introduction

If you are new to PowerPoint, you will need to learn the basics of **working with text**. In this lesson, you will learn how to **cut**, **copy**, **paste**, **format**, and **find and replace** text.

Selecting text:

Before you can move or arrange text, you will need to **select** it.

• Click next to the text you wish to select, drag the mouse over the text, and then release your mouse. The text will be **selected**.



Copying and Moving Text

PowerPoint allows you to **copy** text that is already on a slide and **paste** it elsewhere, which can save you time. If you wish to **move** text, you can **cut and paste** or **drag and drop** the text.

To Copy and Paste Text:

1. Select the **text** you wish to copy, then click the **Copy** command on the **Home** tab.



- 2. Place the insertion point where you wish the text to appear.
- 3. Click the **Paste** command on the **Home** tab.



4. The copied text will appear.

To Cut and Paste Text:

1. Select the **text** you wish to move, then click the **Cut** command.



2. Place the insertion point where you wish the text to appear, then click the **Paste** command.



3. The text will appear in the new location.

You can access the **cut**, **copy**, and **paste** commands by using keyboard shortcuts. Press **Ctrl+X** to cut, **Ctrl+C** to copy, and **Ctrl+V** to paste.

To Drag and Drop Text:

1. Select the **text** you wish to move, then click and drag the text to the **desired location**.



2. The text will appear in the new location.

Benefits of Pet Ownership

- Companionship
- Stress Relief
- Exercise
- Social Opportunities
- · Save Animals from Pounds and Shelters
- Lower Blood Pressure

Formatting and Aligning Text

Formatted text can draw your audience's attention to specific parts of a presentation and emphasize important information. In PowerPoint, you have many options for adjusting your text, including **size** and **color**. You can also adjust the **alignment** of the text to change how it is displayed on the slide.



Find and Replace

When you are working with longer presentations, it can be difficult and time consuming to locate a specific word or phrase. PowerPoint can automatically search your presentation using the **Find** feature, and it allows you to quickly change words or phrases using the **Replace** feature.

To Find Text:

In our example, we'll use the **Find** feature to look for specific dog breeds in our presentation.

1. From the **Home** tab, click the **Find** command.





2. A dialog box will appear. Enter the **text** you wish to find in the **Find what:** field, then click **Find Next**.

Find	? ×
Fi <u>n</u> d what: retriever ✓ Match <u>c</u> ase Find <u>w</u> hole words only	Eind Next Close Replace

- 3. If the text is found, it will be selected.
- 4. Click **Find Next** to find further instances. If none are found, a dialog box will appear. Click **OK**.

Microsoft PowerPoint ×			
That was the last match we fou	ınd.		
ок			

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

To Replace Text:

At times, you may discover that you've repeatedly made a mistake throughout your presentation (such as misspelling someone's name), or that you need to exchange a particular word or phrase for another. You can use the **Replace** feature to make quick revisions. In our example, we'll replace with word "**pounds**" with the abbreviation "**lbs**."

1. From the **Home** tab, click the **Replace** command.



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

Replace	? ×
Fi <u>n</u> d what:	<u>F</u> ind Next
Replace with:	Close
lbs. 🗸	<u>R</u> eplace
 Match <u>c</u>ase Find <u>w</u>hole words only 	Replace <u>A</u> ll

4. If the text is found, it will be selected. Review the text to make sure you want to replace it.

5. If you wish to replace it, select one of the **replace** options. **Replace** will replace individual instances, and **Replace All** will replace every instance. In our example, we'll use the **Replace** option.



6. The selected text will be **replaced**.

Male and Female		7 & 5 pounds 📉	
Shorthair		6 months old	
Likes: Clay pote Male and Fe		emale	7 & 5 lbs.
DISIIK	Shorthair		6 months old
	Likes: Clay p		
_	Dislikes: Par		

7. PowerPoint will move to the next instance of the text in the presentation. When you are finished replacing text, click **Close** to exit the dialog box.

You'll need to be careful when using the **Replace All** option. In the example below, changing the word "Pounds" to "lbs." would have been incorrect in this context. You can click **Find Next** to skip to the next instance without replacing the text.

Benefits of Pet Ow	nership	Replace	? ×
 Companionship Stress Relief Lower Blood Pressure Exercise Social Opportunities 	Fi <u>n</u> d what: pounds Re <u>p</u> lace with: Ibs. Match <u>c</u> ase Find <u>w</u> hole words only	v v	<u>F</u> ind Next Close <u>R</u> eplace Replace <u>A</u> ll
• Save Animals from Pounds	and Shelters		

Applying Themes

Introduction

A theme is a **predefined combination** of colors, fonts, and effects. Different themes also use different **slide layouts**. You've already been using a theme, even if you didn't know it: the default **Office** theme. You can choose from a variety of new themes at any time, giving your entire presentation a consistent, professional look.

Theme Elements

Every PowerPoint theme, including the default Office theme, has its own **theme elements**. Those elements are:

• **Theme Colors**: There are **10 theme colors**, along with darker and lighter variations, available from every **Color** menu.



• **Theme Fonts**: There are **two theme fonts** available at the top of the **Font** menu under Theme Fonts.



• **Theme Effects**: These affect the preset **shape styles**. You can find shape styles on the **Format** tab whenever you select a shape or SmartArt graphic.



Why use Themes?

If you are using a theme, you will probably find that your presentation looks pretty good. All of the colors will work well together, which means you won't have to spend as much time formatting your presentation. But there's another great reason to use theme elements: When you switch to a different theme, **all of those elements will update** to reflect the new theme. You can drastically change the look of your presentation in a few clicks.



In our examples above, you can see the effect of applying different themes to the same slide—each theme uses its own **fonts** and **colors**. But you may have also noticed that the font and colors of the logo in the bottom-right remained **unchanged**: This is because they're
Standard Colors and **Fonts** rather than theme elements. Colors and fonts will only update if you're using **Theme Fonts** or **Theme Colors**.

Themes and Slide Layouts

As you can see from the two different **Title Slides** above, themes can also change various **slide layouts**. Some themes, like the **Wisp** theme in the example below, even include **additional** layouts.

Wisp				Integral		
Title Slide	Title and Content	Section Header	Two Content	Title Slide	Title and Content	Section Header
Comparison	Title Only	Blank	Content with Caption	Two Content	Comparison	Title Only
Picture with Caption	Title and Caption	Quote with Caption	Name Card	Blank	Content with Caption	Picture with Caption
Quote Name Card	True or False					

If you use a **unique** slide layout—such as **Quote with Caption** or **Name Card**—and then switch to a theme that does not include that layout, it may give unexpected results.

Applying themes

All themes included in PowerPoint are located in the **Themes** group on the **Design** tab. Themes can be applied or changed at any time.

To apply a theme:

- 1. Select the **Design** tab on the Ribbon, then locate the **Themes** group. Each image represents a theme.
- 2. Click the **More** drop-down arrow to see all available themes.

FILE	HOI	ME	INSERT	DESIGN	Т	RANSITIONS	ANIMATIONS	SLI
Aa		Aa		Aa		Aa	Aa	 ▲ ▼ ▼
				Theme	5			63

Select the **desired theme**. 3.

This Presentat	tion				-
Aa					
Office					
Aa	Aa	Aa	Aa	Aa	
Aa	Aa	Aa	Aa	Aa	
Aa	Aa	Aa	Aa	Aa	
Aa	Aa	Aa .	Aa	Aa	-
Enable Co	ntent Updates fron	n <u>O</u> ffice.com			
Browse for	r The <u>m</u> es				
Save Curre	ent Theme				3

4. The theme will be applied to the entire **presentation**. To apply a different theme, simply select it from the Design tab.



Once you've applied a theme, you can also select a **variant** for that theme from the **Variants** group. Variants use **different theme colors** while preserving a theme's overall look. Some variants also use different **textures**, as in the example below.



Applying Transitions

Introduction

If you have ever seen a PowerPoint presentation that had special effects between each slide, then you have seen **slide transitions**. A transition can be as simple as fading to the next slide, or it can be a flashy, eye-catching effect. PowerPoint makes it easy to apply transitions to some or all of your slides, giving your presentation a polished, professional look.

About Transitions

There are **three categories** of unique transitions to choose from, all of which can be found on the **Transitions** tab:

• **Subtle:** These are the most basic types of transitions. They use **simple animations** to move between slides.



• **Exciting:** These use more **complex animations** to transition between slides. While they're more visually interesting than **Subtle** transitions, adding too many can make your presentation look less professional. However, when used in moderation they can add an nice touch between important slides.



• **Dynamic Content:** If you're transitioning between two slides that use similar **slide layouts**, dynamic transitions will move only the **placeholders**, not the slides themselves. When used correctly, dynamic transitions can help to **unify** your slides and add a further level of polish to your presentation.



To apply a transition:

- 1. Select the **desired slide** from the **Slide Navigation** pane.
- 2. Click the **Transitions** tab, then locate the **Transition to This Slide** group. By default, **None** is applied to each slide.
- 3. Click the **More** drop-down arrow to display all transitions.



4. Click a **transition** to apply it to the selected slide. This will automatically preview the transition.



You can use the **Apply To All** command in the **Timing** group to apply the same transition to all slides in your presentation. Keep in mind that this will modify any other transitions you've applied.



Try applying a few different types of transitions to various slides in your presentation. You may find that some transitions work better than others, depending on the content of your slides.

To Preview a Transition:

You can **preview** the transition for a selected slide at any time using either of these two methods:

• Click the **Preview** command on the **Transitions** tab.



To Modify the Transition Effect:

You can quickly customize the look of a transition by changing its **direction**.

- 1. Select the **slide** with the transition you wish to modify.
- 2. Click the **Effect Options** command, and choose the desired option. These options will vary depending on the selected transition.

DESIGN TRANSITIONS	ANIMATIONS	SLIDE SHOW	REVIEW
Fade Pu	sh 😴 Effect Options	Sound: [No O Duration:	Sound] - 01.00 ‡
Transition to This Slide	- ^ -	From <u>B</u> ottom	Timing
	÷	From Left	
	¢	From <u>R</u> ight	
	-0-	From <u>T</u> op	

3. The transition will be **modified**, and a **preview** of the transition will appear.

To Modify the Transition Duration:

- 1. Select the **slide** with the transition you wish to modify.
- In the Duration field in the Timing group, enter the desired time for the transition. In this example, we'll increase the time to two seconds, or 02.00, to make the transition slower.



To Add Sound:

- 1. Select the **slide** with the transition you wish to modify.
- 2. Click the **Sound** drop-down menu in the **Timing** group.
- 3. Click a **sound** to apply it to the selected slide, then preview the transition to hear the sound.



Sounds are best used in moderation. Applying a sound between every slide could become overwhelming or even annoying to an audience when presenting your slide show.

To Remove a Transition:

- 1. Select the **slide** with the transition you wish to remove.
- 2. Choose **None** from the **Transition to This Slide** group. The transition will be removed.



To remove transitions from **all slides**, apply the **None** transition to a slide, then click the **Apply to All** command.

Advancing Slides

Normally, in Slide Show View you would advance to the next slide by clicking your mouse (or pressing the space bar or arrow keys on your keyboard). The **Advance Slides** settings in the **Timing** group allows the presentation to advance **on its own** and display each slide for a specific amount of time. This feature is especially useful for **unattended presentations**, such as a tradeshow booth.

To Advance Slides Automatically:

- 1. Select the slide you wish to modify.
- 2. Locate the **Timing** group on the **Transitions** tab. Under **Advance Slide**, uncheck the box next to **On Mouse Click**.
- 3. In the **After** field, enter the amount of time you want to display the slide. In this example, we will advance the slide automatically after 1 minute and 15 seconds, or 01:15:00.



4. Select another slide, and repeat the process until all the slides have the desired timing. You can also click the **Apply to All** command to apply the same timing to all slides.

If you need to advance to the next slide before an automatic transition, you can always click the mouse or press the space bar to advance the slides as normal.

Inserting Pictures

Introduction

Adding pictures can make your presentations more interesting and engaging. You can insert a picture from a file on your computer onto any slide. PowerPoint even includes tools for finding online pictures and adding screenshots to your presentation.

To Insert a Picture from a File:

1. Select the **Insert** tab, then click the **Pictures** command in the **Images** group.



2. A dialog box will appear. Locate and select the **desired image file**, then click **Insert**.



3. The picture will appear on the currently selected slide.



Inserting Online Pictures

If you don't have the picture you want on your computer, you can **find a picture online** to add to your presentation. PowerPoint offers two options for finding online pictures:

• **OneDrive:** You can insert an image stored on your **OneDrive** (previously called SkyDrive). You can also link other **online accounts** with your Microsoft account, such as Facebook or Flickr.

A BACK TO SI	TES					×
6	OneDrive - Perso All folders > Pictures	onal				
						~
Palm trees 2128 x 2832			ti	item selected.	ert Cancel	

To Insert an Online Picture:

1. Select the **Insert** tab, then click the **Online Pictures** command.

FILE	HOM	1E	IN:	SERT	DESIGN	TRANSI	TIONS
*					3 🖸 +		\bigcirc
New	Table	Pictu	res	Online	Screenshot	Photo	Shapes
Slide 🔻	-			Pictures	-	Album 👻	-
Slides	Tables			In	nages		

- 2. The Insert Pictures dialog box will appear.
- 3. Choose **Bing Image Search** or your **OneDrive**. In our example, we'll use Bing Image Search.

		×
Insert Pictures		
Bing Image Search Search the web	exercise]	×P
ConeDrive - Personal javier.flores838@gmail.com	Browse►	
Also insert from:		

- 4. Press the **Enter** key. Your search results will appear in the dialog box.
- 5. Select the desired image, then click **Insert**.

4 BACK TO SITES		×
Bing Image Search 23300 search results for exercise	exercise D	
F#87# THITI	🔊 👔	
Search results are images licensed under Creative Commons. Please to ensure you can comply with it. Show all web results	review the specific license for any image you want to use	>
external image Exercise .jpg 450 x 399 - mrscadybiology.wikispaces.com	1 item selected. Insert	

6. The image will appear on the currently selected slide.

 Click to add text 	
Online Pictures	

When adding images, videos, or music to your own projects, it's important to make sure you have the legal right to use them. Most things that you buy or download online are **protected by copyright**, which means you may not be allowed to use them

Moving and Resizing Pictures

Once you have inserted a picture, you may want to move it to a different location on the slide or change its size. PowerPoint makes it easy to arrange pictures in your presentation.

Slide Notes

You can add **notes** to your slides from the **Notes** pane. Often called **speaker notes**, they can help you deliver or prepare for your presentation.

To Add Notes:

- 1. Click the **Notes** command at the bottom of the screen to open the **Notes** pane.
- 2. Click and drag the **edge** of the pane to **resize** it if desired.
- 3. Click the **Notes** pane, and begin typing to add notes.

You can also access **Notes Page** view to edit and review your notes. Just click the **Notes Page** command from the **View** tab. From there, you can type notes in the **text box** below each slide.



Slide Sections

If you have a lot of slides, you can organize them into **sections** to make your presentation easier to navigate. Sections can be collapsed or expanded in the slide navigation pane and named for easy reference.

To Create Slide Sections:

In our example, we will add two sections: one for dogs that are available for adoption, and another for cats and other pets.

1. Select the **slide** that you want to begin a section.

2. From the **Home** tab, click the **Section** command, then choose **Add Section** from the drop-down menu.



- 3. An **Untitled Section** will appear in the slide navigation pane.
- 4. To **rename** the section, click the **Section** command, then choose **Rename Section** from the drop-down menu.



5. Type the new section name in the dialog box, then click **Rename**.



6. Repeat to add as many sections as you need.

7. In the slide navigation pane, click the **arrow** next to a section name to **collapse** or **expand** it.

To **remove** a section, click the **Section** command, then click **Remove Section**. You can also click **Remove All Sections** to remove all sections from your slides.



Printing

Introduction

Even though PowerPoint presentations are designed to be viewed on a computer, there may be times when you wish to **print** them. You can even print custom versions of the presentation, which can be especially helpful when **presenting** your slide show. The **Print** pane makes it easy to preview and print your presentation.

Print Layouts

PowerPoint includes several different **layouts** when printing a presentation. The layout you choose will mostly depend on **why** you are printing the slide show. There are four different print layouts:

- **Full-page slides:** This prints a full page for **each slide** in your presentation. This layout would be most useful if you needed to **review** or **edit** a printed copy of your presentation.
- **Outline:** This prints an overall **outline** of the slide show. You could use this layout to review the organization of your slide show and prepare to deliver your presentation.

 Handouts: This prints thumbnail versions of each slide, with optional space for notes. This layout is especially useful if you want to give your audience a physical copy of the presentation. The optional space allows them to take notes on each slide.

To Access the Print Pane:

1. Select the File tab. Backstage view will appear.



2. Select **Print**. The **Print** pane will appear.



To Print a Presentation:

1. Select the File tab. Backstage view will appear.



2. Select **Print**. The **Print** pane will appear.



- 3. Choose the desired **printer** and **print range**.
- 4. Chose the desired **print layout** and **color** settings.



Edit Header & Footer

5. When you are done modifying the settings, click **Print**.



Presenting Your Slide Show

Introduction

Once your slide show is complete, you will need to learn how to **present it** to an audience. PowerPoint offers several tools and features to help make your presentation smooth, engaging, and professional.

Presenting a Slide Show

Before you present your slide show, you will need to think about the kind of **equipment** that will be available for your presentation. Many presenters use **projectors** during presentations, so you might want to consider using one as well. This allows you to control and preview slides on one monitor while presenting them to the audience on another screen.

To Start a Slide Show:

• Click the **Start From Beginning** command on the Quick Access toolbar, or press the **F5** key at the top of your keyboard. The presentation will appear in full-screen mode.



You can also click the **Play Slide Show** command at the bottom of the PowerPoint window to begin a presentation from the current slide.



Click the **Slide Show** tab on the Ribbon to access even more options. From here, you can start the presentation **from the current slide** and access **advanced presentation options**.



To Advance and Reverse Slides:

You can advance to the next slide by **clicking your mouse** or pressing the **space bar** on your keyboard. Alternatively, you can use or **arrow keys** on your keyboard to move forward or backward through the presentation.

You can also hover your mouse over the bottom-left and click the **arrows** to move forward or backward.



To Stop a Slide Show:

You can exit presentation mode by clicking the **Esc** key on your keyboard. Alternatively, you can click the **Slide Show Options** button in the bottom-left and then select **End Show**.

Last Viewed Custom Show
Show Presenter View
Screen 🕨
Display Settings 🔹 🕨
Arrow Options
Help
Pause
End Show

The presentation will also end after the **last slide**. You can click the mouse or press the space bar to return to Normal view.



To Skip to a Nonadjacent Slide:

You can jump to slides **out of order** if needed.

1. Locate and select the **See All Slides** button in the bottom-left corner.



2. **Thumbnail versions** of each slide will appear. Select the slide you would like to jump to.

Presenter View

If you are presenting your slide show with a second display, like a projector, you can use **Presenter View**. Presenter View gives you access to a special set of controls on your screen that your audience won't see, allowing you to easily reference **slide notes**, preview the **upcoming slide**, and much more.

To Access Presenter View:

Start your slide show as normal, then click the **Slide Options** button and select **Presenter View**. Alternatively, you can press **Alt+F5** on your keyboard to start the slide show in Presenter View.



Slide Show Setup Options

PowerPoint has various options for setting up and playing a slide show. For example, you can set up an unattended presentation that can be displayed at a kiosk and make your slide show repeat with continuous looping.

To Access Slide Show Setup Options:

1. Select the **Slide Show** tab, then click the **Set Up Slide Show** command.



2. The **Set Up Show** dialog box will appear. From here, you can select the desired options for your presentation.

Set Up	Show ? ×
Show type Presented by a speaker (full screen) Browsed by an individual (window) Browsed at a kiosk (full screen) Show options Loop continuously until 'Esc' Show without narration Show without animation Disable hardware graphics acceleration Pen color: Laser pointer color:	Show slides All <u>From:</u> <u>Custom show:</u> <u>Custom show:</u> <u>Advance slides</u> <u>Manually</u> <u>Using timings, if present</u> <u>Multiple monitors</u> <u>Slide show monitor:</u> <u>Automatic</u> <u>Resoluțion:</u> <u>Use Current Resolution</u> <u>V</u> <u>Use Presenter View</u>
	OK Cancel

Show Options

Show Options include:

- Loop continuously, which will repeat the slide show until you press the Esc key on your keyboard.
- Disable narration and animation.
- Change the default **pen** and **laser pointer colors**.

To advance slides automatically, you'll need to customize the slide timing on the **Transitions** tab. Review our lesson on **Applying Transitions** to learn how.

DESIGN	TRANSITIONS	ANIMATIONS	SLIDE SHOW	REVIEW	VIEW
Fa	ide Push		Sound: [No Duration:	Sound] • 00.01 ‡	Advance Slide On Mouse Click After: 01:15.00
Transition t	o This Slide			Timing	1

Animate or Edit Multiple Objects at Once

If you want to animate or edit multiple objects in your presentation and display them at the same time on screen, you should group the objects together to animate all of them easily in one go, instead of repeating the steps for each object. Grouping multiple PowerPoint objects into one can be very useful and can save you a lot of time as you edit the presentation. Changes you make to a merged object will be applied to all sub-objects, which makes applying effects or animation to multiple elements a breeze.

Here is how to group objects into one:

1. Launch **PowerPoint**, and open the document you want to edit.

2. Go to the desired slide, and **select the objects you want to group** while **holding the Ctrl key**. Click on any of the selected objects to open the context menu, and then choose **Group** -> **Group**.



Alternatively, you can go to **Picture Tools -> Format -> Group -> Group** to merge the objects together.



3. As a result, all the selected objects will be merged into one. After the merging process, there is only one big bounding box around the objects instead of individual bounding boxes for each object.

You can move, edit, or delete the newly formed object as you would normally. When a change is applied to it, all sub-objects will be affected.

Before:



After:



3. Now, you can switch to the **Animations** tab on the ribbon and apply a new animation to the object. When you play the animation, all objects will appear on the screen at the same time with the same effect.



4. Later, if you want to un-merge the big object, right-click on it, and choose **Group -> Ungroup**. Sub-objects will be separated, and you can edit them individually. Please note that all the changes you made to the big object will be discarded after you ungroup the objects.

Trigger Animation When Clicking on an Object

By default in PowerPoint, you can activate the animation of objects using a click sequence. You can, however, edit this setup and let your custom animation trigger when you click on a specific object on a slide.

While using a click sequence is adequate for normal use, there may be special cases when you want to show only parts of a presentation at a specific time, or you may want your slide show to be interactive. The ability to trigger an animation when clicking on an object gives you better control of how objects behave on your slides. Combining the two animation control setups is ideal for an effective presentation.

1. Launch **PowerPoint**, and open the document you want to edit.

2. If you have not created an object yet, insert the desired one from the **Insert** tab. After that, add a custom animation to the object from the **Animations** tab. By default, the **Animation** box only shows a small number of animations. Click the small arrow at the bottom right of the box to reveal them all.



3. Once the animation is applied, highlight the object, and click the **Animation Pane** button on the ribbon.



4. The **Animation Pane** appears on the right side of the program. Highlight the object that you want to edit, click the small drop-down arrow, and choose **Effect Options**.



5. In the new pop-up window, switch to the **Timing** tab. Then click on the **Triggers** button at the bottom to see more timing controls, choose the **Start effect on click of** option, and choose the object that will be clicked in the box. Make sure that the object you choose is visible on the slide, or you will not be able to click on it at all.

		Fly In	? ×
Effect Ti	ming	1	
Start:	්ල On Click	~	
Delay:	0	seconds	
Duration:	0.5 seconds (Ve	ery Fast) 🖌	
Repeat: (none)		~	4
Rewind	when done play	/ing 🧑	
<u>Triggers</u>			V
O <u>A</u> nimate	as part of click	sequence	
 Start eff 	ect on <u>c</u> lick of:	Title 1: Tech-recip	oes 🗸
St. off	ect on play of:	÷	
	-		
	3		
	-		

6. Click the **OK** button to save the changes. Come back to the slides, and switch to **slide show** mode to see how the objects behave, depending on your clicks.

Add Sound Effects to Transitions and Animations

Much like animation, sound effects play an important role in creating a successful PowerPoint presentation. The steps in this tutorial will help you add sound effects to your existing slides. Before adding any sound effects to your slides, launch PowerPoint, and open the document that you want to edit.

Adding Sound Effects to Animations:

1. If you have not added an animation effect to your object, head to the **Animations** tab, and choose your desired effect in the **Animation** box. Use the drop-down box to expand the list and view all available animations.



2. Once you have applied animation to the object, click the **Animation Pane** option on the ribbon to show the page on the right side. We will need this pane to access more advanced features of the animation option.



3. Next, choose the object's animation that you have just added, click the arrow icon, and choose **Effect Options** from the menu.



4. In the new **Animation** window, go to the **Effect** tab, and choose your desired sound effect under the **Sound** option. You can choose one from the preset list or choose your own sound effect by selecting the **Other Sound** option. Please note that the file must be in **WAV** format.

	Fly In	? ×							
Effect Timing	Text Animation								
Settings									
Direction:	From Bottom	~							
S <u>m</u> ooth start:	0 sec	÷							
Smooth end:	0 sec	-							
<u>B</u> ounce end:	0 sec	-							
Enhancemen									
Sound:	[No Sound]	✓							
<u>A</u> fter animation:	Suction Typewriter	^							
Animate te <u>x</u> t:	Voltage Whoosh								
	Wind Other Sound	▼ tters							
	ОК	Cancel							

5. When you are done, click the **OK** button to save the change. Now, you can test out the effect by playing the slide.

Adding Sound Effects to Page Transitions:

1. To add a transition effect, choose your page, go to the **Transitions** tab, and choose one of the available effects in the box.



2. When the transition is added, find the **Sound** option in the same tab, and choose one of the available sound effects from the menu. You can also choose your own sound by clicking on the **Other Sound** option at the bottom of the list.



3. The added sound can be previewed when you play the page transition.

Convert Presentation to a Word Document

Handout are a great visual aid for your audience. Creating handouts of your presentation can really help your audience stay on track and follow along. By converting your PowerPoint presentation to a Microsoft Word document, you can easily edit, print, and distribute your information.

Although you can print and share your presentation directly, converting it first to a Word document gives you a large multitude of additional options. These steps will cover the conversion process will also include selecting one of many text layouts that are available.

Before we begin, open up your presentation in PowerPoint 2013.

1. First, select the **FILE** tab from the PowerPoint ribbon



2. From the list of available options on the left-hand side, choose **Export**.



3. Now, we want to create out handouts. This can be done by selecting the **Create Handouts** option, and then choosing **Create Handouts** once more.



4. You will now be presented with a **Send to Microsoft Word** window. From here, choose the type of page layout you want. For this tutorial, we will select **Blank lines next to slides**. What this does is simply create blank lines next to each slide in Word. Your audience can use this space to take down their own notes. Once you have selected a layout that you like, click **OK** to begin the conversion process.



Once your conversion process has been completed, you should now see a new Word document with all of your slides and appropriate text layouts.

END OF COURSE EXERCISES

1. Explain the function of the Presenter View feature in Microsoft PowerPoint 2013.						
2. There are four (4) different print layouts in Microsoft PowerPoint 2013. Explain each of them						
a)						
b)						
c)						
d)						
3. What are themes? Why would you use themes in your PowerPoint preparation?						
 4. If you frequently work with the same presentation, you can pin it to backstage view for easy access. Describe how you will pin your presentation to the backstage view. 						
5. You have saved your presentation in the .pptx file type. Your lecturer however wants your work to be in either one of the following file types before submission:						
a). PDF: (Save the presentation as a PDF document instead of a PowerPoint file)						
b) . Video: (Save the presentation as a video)						
c). Handouts: (Print a handout version of your slides)						

Explain how you would **export** your presentation from PowerPoint 2013 into each of the above named **file types**:

a)	 	 	
b)	 	 	
c)	 	 	

6. You saved your presentation to **"My Documents"** folder, while you were working on it, PowerPoint crashed all of a sudden, how would you restore the file using **AutoRecover** feature?