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Introduction

Microsoft Excel is a popular spreadsheet program that is used in homes, businesses, and schools. Many people often overlook the value—as well as the simplicity—of spreadsheet programs. Spreadsheets can be used to keep track of student grades, maintain budget information, and solve mathematical problems. A spreadsheet can be used anytime calculations need to be performed.

In this book, you will learn about working with spreadsheets in the *Microsoft Excel* program. Though all spreadsheet programs are similar, there are some features and processes unique to each. The thirty activities will familiarize you with creating spreadsheets from scratch, manipulating information in a spreadsheet, changing the layout and format of a spreadsheet, inserting formulas into a spreadsheet, and creating charts and graphs of information contained within a spreadsheet file.

If you are new to spreadsheets, it is recommended that you work through the activities in order, especially Activity 1. Doing so will provide you with opportunities to learn about the various menu items and features of *Microsoft Excel*. In addition, Activity 1 also walks you through some basic features of the Windows operating system. Beginning with Activity 2, you will create specific spreadsheets that apply new skills. If you are using a Macintosh operating system, the features of *Microsoft Excel* are nearly identical to what is written and shown in this book.

Many of the activities include questions that are designed to help you think about why the spreadsheet responds as it does. Space is provided on which to respond to the questions. Correct answers are provided in the back of the book.

Notation

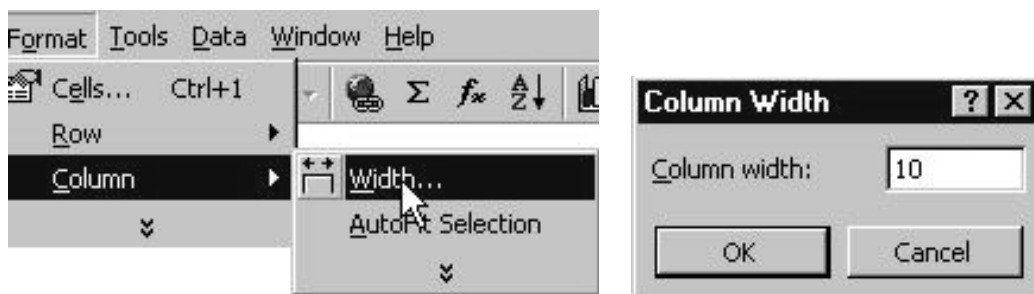
Throughout the book, menu items are referred to in **BOLD CAPITALS**.

Commands that are found within one of these menus are written in ***Bold Italics***.

Buttons or other selections that need to be clicked are written in **Bold**.

When you are asked to type something into the spreadsheet, it will be noted in *italics* in the text.

When you are asked to press a specific key, it will be indicated inside < >. Example: Press <Enter>.



The screen shot above is written in the text like this:

Go to **FORMAT**, select ***Column*** and then choose ***Width*** from the right menu. Type *10* in the column width box. Click **OK**.

Activity 1: Learn About Spreadsheets

Overview: This activity familiarizes you with spreadsheet vocabulary that will be used throughout the book. It also helps you to understand how to create new spreadsheets, open existing spreadsheets, and save spreadsheet files.

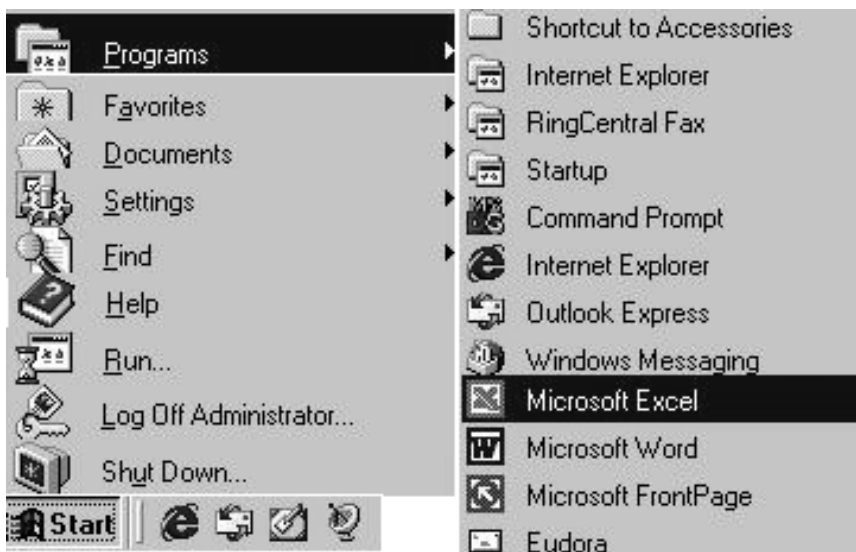
A spreadsheet program is a computer application used to organize, calculate and manipulate numerical data.

Opening a New Spreadsheet Workbook

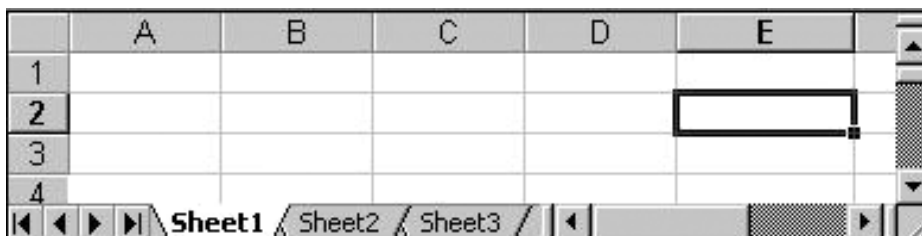
- A. Click the Start button in the lower-left corner of the screen.



- B. Select *Programs* and then, to the right, choose *Microsoft Excel*.



When you open *Excel*, you open a new workbook. A new workbook file contains three empty worksheets, also called sheets. The names of these worksheets appear on tabs at the bottom of the workbook screen. These tabs are labelled Sheet 1, Sheet 2, and Sheet 3. Sheet 1 is the active spreadsheet, but you can switch between multiple sheets just by clicking the desired tab. More sheets can be added to any workbook, and the default of three sheets can be changed if you go to **TOOLS** and select *Preferences*.



For every activity in this book, you will use Sheet 1 in the workbook to complete the exercise.

Activity 1: Learn About Spreadsheets *(cont.)*

The Spreadsheet Grid

When you look at a spreadsheet screen, you see a grid made up of columns, rows and cells.

Column

A column contains information that is arranged vertically. Column labels are displayed across the top of the spreadsheet screen; they are labelled with letters, beginning with the letter A.

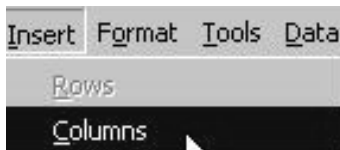
	A	B	C
1			
2			
3	Column A	Column B	Column C

- A. Hold the <CTRL> key and the right-arrow key on the keyboard to move all the way to the right end of the spreadsheet. What letter label does the last column have? _____
This translates to 230 columns.

- B. You can add additional columns to the spreadsheet. First, click the column label that you would like to slide to the right to make room for the new column.

	A	B	C	D
1				
2				
3	Column A	Column B	Column C	

- C. Next, go to **INSERT** and select *Columns*.



- D. This will add a new column to your spreadsheet, preserving what you had already created.

	A	B	C	D
1				
2				
3	Column A		Column B	Column C

- E. To delete an existing column, click on the letter of the column you would like to delete. Then go to **EDIT** and select *Delete*.

Row

A row contains information that is arranged horizontally. Row labels are displayed across the left side of the spreadsheet screen; they are labelled with numbers, beginning with the number 1.

	A	B	C
1			▶ Row 1
2			▶ Row 2
3			▶ Row 3

Activity 1: Learn About Spreadsheets *(cont.)*

- A. Hold the <CTRL> key and the down-arrow key on the keyboard to move all the way to the right end of the spreadsheet. How many rows does your spreadsheet file have?
- _____
- B. Like columns, you can add additional rows to your spreadsheet. Click the row label (the number) where you would like a new row to be placed. Then go to **INSERT** and select **Rows**. Delete rows by clicking the row number you would like to delete. Then go to **EDIT** and select **Delete**.

Cell

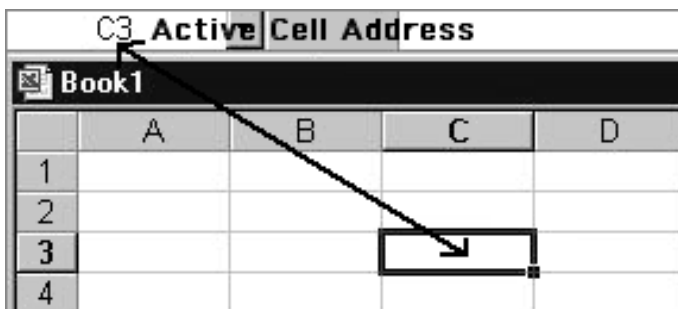
A cell is a box in which a column and a row intersect. Each cell in a spreadsheet grid has a name or

	A	B	C
1	A1	B1	C1
2	A2	B2	C2
3	A3	B3	C3

address based on its location. The first cell in a spreadsheet grid is called A1. Note that the column letter is first and the row number is second. Cell labels are not case sensitive.

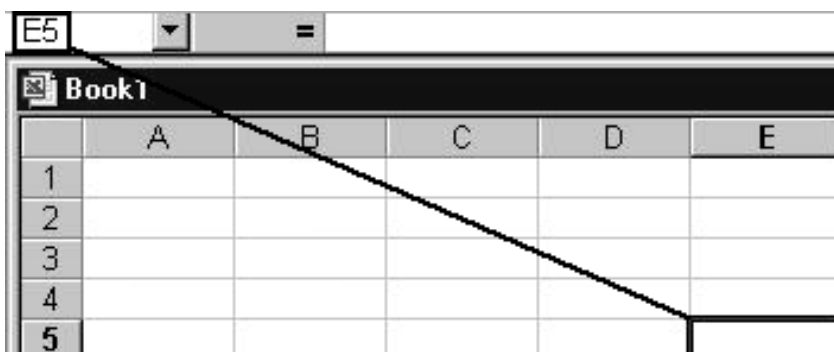
Active Cell and Active Cell Address

A spreadsheet always has one active cell. The active cell is the cell in which the user has clicked.



It is outlined in the computer's outline color. The address of this active cell is always displayed in the active cell address area, as indicated in the diagram below.

- A. Click cell E5 (you may need to use one or both scroll bars to get to E5). Observe how the



active cell address area displays the cell label, E5.

- B. Click the last cell of this spreadsheet file. To get there, hold the <CTRL> key and then click the down arrow and the right arrow on the keyboard. What is the address of this cell?
- _____

This means there are 30 x 65,536 or 15,073,280 cells in the spreadsheet.