

7



Microsoft Excel 2000

Creating a Budget Spreadsheet

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Prerequisites

- “Getting Starting on the Computer” lesson or familiarity with the Windows operating system.
- “Choosing the Right Office Program” lesson or familiarity with the Microsoft Office programs.


Objectives

You will be able to:


- Enter, edit, and move text.
- Create and calculate a formula.
- Resize and format columns.
- Save a spreadsheet.

BEFORE YOU BEGIN


Gather Supplies

- You will need a separate sheet of paper to write your answers to the review questions.
-  ► ■ In order to save your work, you will need a floppy or Zip disk.

Photocopy Worksheets and Fact Sheets

-  ► Worksheets and fact sheets are designed to be photocopied so that you can refer to them during the lesson, write directly on them, and take them home. If a lesson includes worksheets or fact sheets, you'll find them at the end of the lesson. Check now to see if this lesson includes any. Photocopy them before you start the lesson.

Copy Working Files to a Disk

-  ► If a lesson includes an electronic working file, you'll find a printed copy at the end of the lesson to use as a reference. You will work directly in the electronic copy during the lesson. Check now to see if this lesson includes a working file. If it does, copy the electronic working file to a floppy or Zip disk. You can copy the working file from the desktop or download it from the Bill & Melinda Gates Foundation Web site <http://www.gatesfoundation.org/libraries/uslibraryprogram/granteesupport/trainingcurricula/default1.htm>.

To Copy a Working File from the Desktop

1. Insert a floppy or Zip disk into the appropriate disk drive of the computer.
2. Double-click the **Computer Companion** folder on the desktop.
3. Double-click the folder of the lesson you want to use. The files in each lesson folder include the working files that are used with the lesson.
4. Click the working file you want to use.
5. Click **Edit** on the menu bar, and select **Copy**.
6. Click the downward-pointing arrow on the **Address** bar, and select **3½ Floppy** to save to a floppy disk or select **Removable Disk (E:)** to save to a Zip disk.
7. Click **Edit** on the menu bar, and select **Paste**. The file is copied onto the disk.
8. Double-click the file to open and begin using it.

Printing Your Work

You might or might not be able to print from the computer you are working on. Consult a staff member for instructions. None of the lessons require printing.

See the *Printing, Saving, and Opening Files Quick Guide* for more information.

You are free to copy or print any part of this book. Copies may not be sold or used for commercial purposes.

Introduction

Double-click the **Microsoft Excel** icon  to start the program.

Microsoft Excel is a spreadsheet program you can use to organize numbers and data. You can use Excel to create budgets, schedules, and databases, such as address books.

Defining Excel Terms

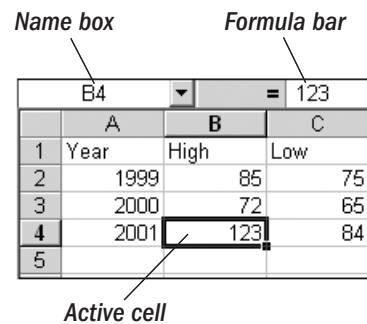
Spreadsheets are tables of data values, which are commonly used for budgets or other finance-related tasks. You can use Excel spreadsheets to organize data values into cells and define the relationships between cells using formulas. A spreadsheet in Excel is the workspace—the area where you type the data.

Spreadsheets have 256 lettered, vertical columns and 65,536 numbered, horizontal rows. An entire Excel file is called a *workbook*. Workbooks usually contain three spreadsheets, but you can add more if necessary.

Each *cell* in a spreadsheet is a rectangular space that can hold text, a value, or a formula. A cell is where you type numbers or text in the spreadsheet. Since each row and column in an Excel spreadsheet is unique, each cell can be identified by a unique address—its column letter and its row number. For example, cell B17 is located at the intersection of column B and row 17. Because of the relationship between cells, a change in one cell produces a change in related cells.

A selected cell is called the *active cell*. The active cell is surrounded by a bold border and its address appears in the Name box, located on the left side of the window below the toolbar. If you type a cell address in the Name box and press ENTER, that cell becomes active.

The *Formula bar*, located below the toolbar to the right of the Name box, displays text from the active cell. If there is a formula in the cell, the Formula bar displays the formula, not the result of the formula.



REVIEW QUESTION

(Use a blank sheet of paper to write down your answer. You can check your answer against the one provided at the end of the lesson.)

1. What is the active cell?

**EXCEL TIP**

You must make a cell active to move it.

Entering and Editing Text

To Enter Text

1. Click **New** on the toolbar to open a new workbook.
2. Click cell **A1**. Cell A1 is now active.
3. Type your first and last name in cell A1. The text appears in both the active cell and the Formula bar.
4. Press the **ARROW** keys to move to cell D1, and type today's date.

	A	B	C	D
1	Jimmy Be...			May 11 2001
2				

To Move Text

1. Click row heading **1**. The row is selected.
2. Rest your mouse pointer on a horizontal edge of row 1. The mouse pointer changes to a white arrow.
3. Click, hold down the mouse button, and drag row 1 to row 4. Row 1 becomes row 4.
4. Click the cell with your name (cell **A4**).
5. Drag cell A4 back to cell A1.
6. Select the cell with the date in it, and drag it back to its original position (cell **D1**).
7. Double-click cell **A1**. The mouse pointer is now a blinking vertical line. You are now in "edit mode" and can edit the cell's contents.
8. Add your middle name to cell A1.

REVIEW QUESTIONS

(Use a blank sheet of paper to write down your answers. You can check your answers against those provided at the end of the lesson.)

1. How do you change the contents of a cell?
2. How do you move data from one cell to another?

Calculating Formulas

To Calculate a Formula

1. Click cell **A2** to make it active.
2. Type 1 in cell A2, 2 in cell A3, and 3 in cell A4.

**EXCEL TIP**


When you type a formula in a cell, instead of typing each cell address (for example, A3, A4) after the equal sign (=), you can click the cells you want to include in the formula.

3. Type `=A2 + A3 + A4` in cell A5, and press ENTER. The sum of cells A2, A3, and A4 appears in cell A5.

	A	B	C	D	E
1	Jimmy Super Beans			May 11 2001	
2	1				
3	2				
4	3				
5	6				
6					

To Use AutoSum

Another way you can calculate a sum in Excel is to use the AutoSum button on the toolbar. You can use AutoSum to automatically add the data in the cells above the active cell. If the cells above the active cell do not contain data, AutoSum adds the data in the cells to the left of the active cell. AutoSum sums the data only in consecutive cells that contain data. For example, if there is data in cells A1 and cells A3 to A5, only the data in cells A3 to A5 will be summed using AutoSum. You can also select a range of cells that you want to sum using AutoSum.


1. Place the mouse pointer in cell A2, hold down the left mouse button, and drag the pointer to cell A4 to select cells A2, A3, and A4.
2. Click **AutoSum** . The sum appears in cell A5.

REVIEW QUESTION

(Use a blank sheet of paper to write down your answer. You can check your answer against the one provided at the end of the lesson.)

1. What is the AutoSum command used for?


Creating a Monthly Budget

An electronic budget is a great tool you can use to organize your finances. Keep in mind that there is usually more than one way to do something in Excel. If you think of a different way to complete a task, go ahead and try it. If it doesn't work, you can always click **Undo**  on the toolbar. At the end of the lesson, you'll find a sample budget spreadsheet.


Instructor Note

This activity can be facilitated by the trainer or self-directed by the trainees. Refer trainees to the Excel 2000 Quick Guide if necessary. Trainees can work individually or in pairs. Upon completion, have volunteers share their budget spreadsheets.

To Enter Column Titles

1. Click **New**  on the toolbar to open a new workbook.
2. Type `Monthly Budget` in cell A1, and press ENTER.
3. Type `Item` in cell A2, and press TAB to move to cell B2.
4. Type `Amount` in cell B2, and press TAB to move to cell C2.
5. Type `Comments` in cell C2.
6. Type `TOTAL` in cell A11, `INCOME` in cell A13, `EXPENSES` in cell A14, and `SAVINGS` in cell A15.

**EXCEL TIP**

You can also use the *Merge and Center* button .


**EXCEL TIP**

If the data that you type in a cell does not fit, ##### appears in the cell instead of the data. Double-click the boundary to the right of the column heading to automatically resize the column to fit all current data.


To Format Column Titles

1. Place the mouse pointer in cell A2, hold down the left mouse button, and drag to cell C2 to select the row of cells containing the **Item**, **Amount**, and **Comments** titles. The row is selected.
2. Click **Bold** on the Formatting toolbar. If the **Bold** button is not visible, click the arrow at the end of the Formatting toolbar to display more buttons. Keep the cells selected.
3. Click **Format** on the menu bar, and select **Cells**. The **Format Cells** dialog box appears.
4. Click the **Patterns** tab, and select a light color from the color choices.
5. Click **OK**.

To Move and Center the Spreadsheet Title

1. Select cells A1 to C1.
2. Select **Cells** on the **Format** menu. The **Format Cells** dialog box appears.
3. Click the **Alignment** tab, and select the **Merge Cells** check box.
4. Click **OK**.
5. Select cell A1.
6. Click **Center**  on the Formatting toolbar.

To Enter Data

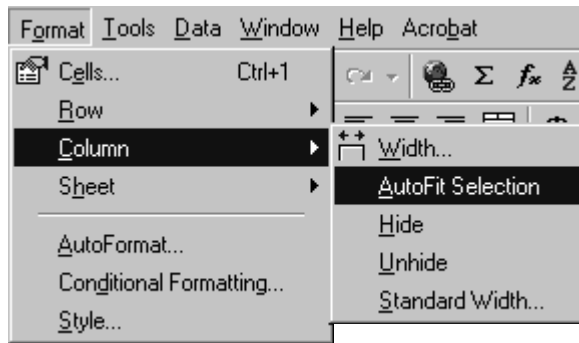
1. Select cell A3.
2. Type Rent (or Mortgage), and press ENTER.
3. Type Utilities in cell A4.
4. Type Transportation in cell A5.
5. Type Food in cell A6.
6. Type Medical in cell A7.
7. Type Clothing in cell A8.
8. Type Leisure in cell A9.
9. Type Miscellaneous in cell A10.
10. Type a dollar amount for each category, beginning with cell B3 and ending with cell B10.
11. Type a dollar amount for your income in cell B13.
12. Select cells B3 through B15, and click **Currency Style**  to apply a currency style.

To Format Data

You can format data before or after you type.

1. Select columns A through C (the entire spreadsheet).

- Click **Format**, point to **Column**, and select **AutoFit Selection** to resize the columns.



To Enter Formulas

- Type `=SUM(B3 : B10)` in cell B11.
- Type `=B11` in cell B14. Your total expenses are inserted in cell B14.
- Type `=B13 - B11` in cell B15. The number in cell B11 is subtracted from the number in cell B14, resulting in the savings amount.

To Save Your Work

- Click **Tools** on the menu bar, and select **Spelling** to spell-check your spreadsheet.
- Click **Print Preview** on the toolbar, and view your spreadsheet.
- Click **Close**. If the spreadsheet looks the way you want, proceed to the next step. If the spreadsheet doesn't look the way you want, make the necessary changes.
- Insert a disk into the appropriate disk drive.
- Click **File** on the menu bar, and click **Save As**.
- Select the appropriate disk drive on the **Save in** list.
- Type `Budget` in the **File Name** text box.
- Click **Save**.
- Click **Close** to quit Excel.

REVIEW QUESTIONS

(Use a blank sheet of paper to write down your answers. You can check your answers against those provided at the end of the lesson.)

- How do you select a row?
- Why would you type an equal sign in a cell?

EXCEL TIP

There are many ways you can calculate a formula in Excel. Two ways to add the B column are:

- Type `=B3+B4+B4+B5+B6+B7+B8+B9+B10` in cell B11.
- Select cells **B3–B11**, and click **AutoSum**.



**EXCEL TIP**

To use the AutoFill feature:

1. Type the first date or number in the first cell in the range.
2. Select the cell.
3. Place the mouse pointer over the cell's fill handle. The pointer changes to +.
4. Drag down or to the right to fill cells in increasing order, or drag up or to the left to fill cells in decreasing order.

**EXCEL TIP**

When typing a number as a value (that is, a number that will not be used in a formula), precede the number with a single quotation mark.

Using AutoFill

You can use Excel's AutoFill feature to quickly and easily fill in a list of dates. For example, if you are typing the months of the year beginning with January, you can use the AutoFill feature to finish the list automatically. This feature will also fill in numbers and formulas.

To Use AutoFill

1. Open a new Excel workbook.
2. Type January in cell A6.
3. Select cell A6.
4. Place the mouse pointer over the fill handle, the small black square in the lower-right corner of the cell. The pointer changes to +.

	A
1	
2	
3	
4	
5	
6	January
7	

5. Drag down to fill cells A7 to A17 with the rest of the months of the year. Cell A17 contains December.
6. Type '2001 in cell B6.
7. Fill cells B7 to B17 using the AutoFill feature. Cell B17 contains 2012.

Wrapping Up

Key Points to Remember

Microsoft Excel is a spreadsheet program you can use to create budgets, schedules, and simple databases, such as address books. The Excel window is a spreadsheet made of cells containing text or numbers arranged in rows and columns.

Answers to Review Questions

DEFINING EXCEL TERMS

1. The active cell is the selected cell. It is surrounded by a bold border and is identified by its cell address, which appears in the Name box.

ENTERING AND EDITING TEXT

1. To change the contents of a cell, double-click the active cell to enter “edit mode.” You can edit directly in the cell or make changes in the Formula bar.
2. To move data from one cell to another, drag the data to the new cell, or cut and paste the data.

CALCULATING FORMULAS

1. You can use AutoSum to add numbers automatically.

CREATING A MONTHLY BUDGET

1. To select a row, click a row heading, that is, a number.
2. You would type an equal sign in a cell if you wanted to calculate a formula rather than type text or data in the cell.

Additional Resources

- *Excel 2000 Quick Guide*
- Quick Excel 2000 Tips
<http://www.peachpit.com/features/0599off2k/off2k.excel1.html>
- Excel 2000 Tutorials
<http://tutorials.beginners.co.uk/read/query/excel%202000>

Sample Budget

Monthly Budget (March)		
Item	Amount	Comments
Rent	\$800.00	May 1st this goes to \$825.00
Utilities	\$40.00	Look into new window
Transportation	\$50.00	Take the bus
Food	\$150.00	
Medical	\$25.00	Still owe the co-pay from eye doctor
Clothing	\$75.00	Try and get this down to \$40.00
Leisure	\$100.00	
Miscellaneous	\$100.00	Three birthdays this month
TOTAL	\$1,340.00	
Income	\$2,500.00	
Expenses	\$1,340.00	
Savings	\$1,160.00	

