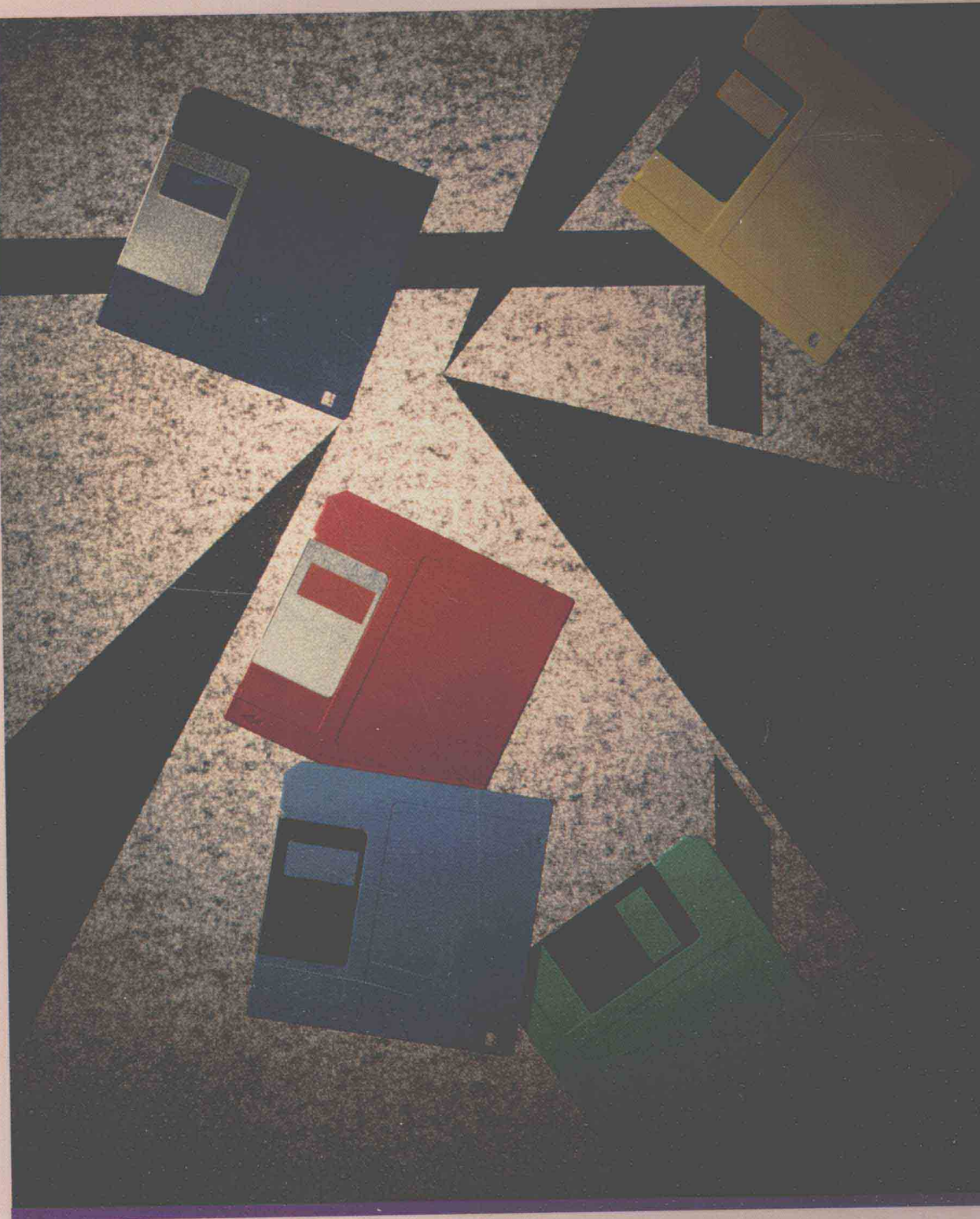


IRWIN
ADVANTAGE
SERIES FOR
COMPUTER
EDUCATION

HUTCHINSON

SAWYER

COULTHARD



Quattro[®] Pro 5.0 for Windows[®]

QUATTRO® PRO 5.0

FOR WINDOWS®

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THE IRWIN ADVANTAGE SERIES
FOR COMPUTER EDUCATION



IRWIN

BURR RIDGE, ILLINOIS
BOSTON, MASSACHUSETTS
SYDNEY, AUSTRALIA

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Printed in the United States of America.

ISBN 0-256-16470-3

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USING THIS GUIDE

This tutorial is one in a series of learning guides that lead you through the most popular microcomputer software programs available. Concepts, skills, and procedures are grouped into session topics and are presented in a logical and structured manner. Commands and procedures are introduced using hands-on examples, and you are encouraged to perform the steps along with the guide. Although you may turn directly to a later session, be aware that some sessions require, or at least assume, that you have completed the previous session. For maximum benefit, you should work through the short-answer and hands-on exercises appearing at the end of each session.

The exercises and examples in this guide use several standard conventions to indicate menu instructions, keystroke combinations, and command instructions.

MENU INSTRUCTIONS

When you need to execute a command from a menu—the row of menu choices across the top of the screen—the tutorial's instruction line separates menu options with a comma. When you need to choose an option from a menu, we will display the name of the option with an underlined letter. For example, the command for opening a file is shown as:

CHOOSE: File, Open

This instruction tells you to press the F key to choose the File option and then press the O key to choose the Open option. Keys separated by commas are not pressed at the same time. (*Note:* We describe an additional method for choosing commands in the Using Menu Mode section in Session 1.)

KEYSTROKES AND KEYSTROKE COMBINATIONS

When you need to press two keys together, the tutorial's instruction line shows the keys joined with a plus sign (+). For example, to move the cursor one screen to the right, hold down **Ctrl** and then press **→**. The instruction for moving the cursor one screen to the right is:

PRESS: **Alt**+**F5**

COMMAND INSTRUCTIONS

This guide indicates with a special typeface data that you are required to type in yourself. For example:

TYPE: George Washington

When you are required to enter unique information, such as the current date or your name, the instructions appear in italics. The following instruction directs you to type your name in place of the actual words: "your name."

TYPE: *your name*

Instructions that use general directions rather than a specific option or command name appear italicized in the regular typeface.

PRESS: *the cursor-movement keys to highlight the print block*

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SESSION 1

QUATTRO PRO FOR WINDOWS: FUNDAMENTALS

Be thankful for the electronic spreadsheet, one of the most commonly used tools in business! A few years ago, the spreadsheet was made out of paper and its 7,500 or so tiny spaces had to be filled in by hand. Many a manager, accountant, and business planner consumed several pencils and cups of coffee revising this paper instrument. Today electronic spreadsheets such as Quattro Pro for Windows enable you to insert and change numbers with ease. This session shows you how to begin using this valuable tool.

PREVIEW

When you have completed this session, you will be able to:

Explain the applications for electronic spreadsheets.

•

Explain the process of creating a spreadsheet.

•

Load Microsoft Windows and start Quattro Pro.

•

Move around a worksheet using the mouse and keyboard.

•

Enter and edit text, numbers, and formulas in a worksheet.

•

Perform the UNDO command.

•

Access the Help facility.

•

Exit Quattro Pro and Windows.

SESSION OUTLINE

- Why Is This Session Important?
- Working with Electronic Spreadsheets
- Planning Your Spreadsheet
- The Windows Advantage
- Working with Quattro Pro for Windows
 - How the Mouse Is Used in Quattro
 - How the Keyboard Is Used in Quattro
- Starting Quattro Pro for Windows
- The Guided Tour
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- Erasing a Cell
- Using the UNDO and REDO Commands
- Getting Help
- Leaving Quattro Pro
- Summary
 - Command Summary
- Key Terms
- Exercises
 - Short Answer
 - Hands-On

WHY IS THIS SESSION IMPORTANT?

This guide leads you step-by-step through using the spreadsheet application named Quattro Pro for Windows. You will initially concentrate on spreadsheet fundamentals, and then explore the basic procedures and commands required to work effectively with the Quattro spreadsheet.

You will begin by exploring the benefits of using an electronic spreadsheet. After loading Microsoft Windows and Quattro Pro for Windows, you learn about the primary components of the program and how to enter text, numbers, dates, and formulas into a worksheet. The session also introduces the UNDO feature for reversing commands and the Help facility.

WORKING WITH ELECTRONIC SPREADSHEETS

For years, people used calculators and long scraps of paper to perform numerical calculations. With the introduction of the electronic spreadsheet, these tools have almost become obsolete. Accountants, statisticians, and business people now use spreadsheet programs to analyze financial and statistical results. However, an electronic spreadsheet is much more than a glorified calculator! Spreadsheets are often the primary tool used in financial decision-making, forecasting, and scenario analysis.

An electronic spreadsheet is similar to a manual worksheet or an accountant's pad. With a manual worksheet, you write descriptive labels in the first column and then enter numbers under adjacent column headings. An electronic spreadsheet is also composed of rows and columns. To build an electronic spreadsheet, you type information into the individual cells, or intersections of rows and columns.

One of the primary advantages of an electronic spreadsheet over a manual worksheet is the ability to perform **what-if analysis**. The term *what-if* refers to your ability to change information in the spreadsheet and immediately see the effects of the change on other figures. For example, *"What if my sales were only 5,000 units this year? How would that affect my net income?"* or *"What if the interest rate was 8.5%? How would that affect my mortgage payment?"* This capability makes the electronic spreadsheet one of the most popular business software tools available.

Some additional advantages of using electronic spreadsheets include:

1. *Electronic spreadsheets are much larger than manual worksheets.*
While manual worksheets are limited by paper size, electronic spreadsheets typically contain hundreds of columns and thousands of rows for entering data. This expansive area allows you to keep related information together and to produce reports that are larger than a normal piece of paper.
2. *Electronic spreadsheets can perform mathematical calculations.*
Spreadsheets are used to calculate financial, statistical, and mathematical formulas. A **formula** is a mathematical expression, such as $200+350$, that is entered into a cell on the spreadsheet. Its result may be used in other formulas or printed out in a report.
3. *Cells in electronic spreadsheets can reference other cells.*
A formula may consist solely of numbers or it may refer to other cells in the spreadsheet. Rather than entering the equation $200+350$, a formula can reference the cells that contain these numbers. With a manual worksheet, changing a single number can mean hours of extra work in recalculating totals, averages, and percentages by hand. Fortunately, changing a number in an electronic spreadsheet produces a ripple effect of recalculations for all formulas depending on that value.
4. *Electronic spreadsheets can be stored and retrieved for repeated use.*
You can permanently save electronic spreadsheets onto diskettes, hard disks, or other types of media for safe storage. Rather than searching through endless filing cabinets for manual worksheets created months before, you can use your computer's electronic filing system to retrieve files instantaneously. An electronic spreadsheet can be retrieved, edited, updated, printed, and then saved under a new name quickly and easily.

PLANNING YOUR SPREADSHEET

Would you build a house or an apartment building without an architect's plans? Probably not! Even experienced developers and builders rely heavily on the planning phase before breaking ground. Likewise, would you create a spreadsheet without a clear objective? Obviously, the risks are much greater when you build a house or an apartment than when you create a spreadsheet. Or are they? For instance, a single formula entered incorrectly can ripple through an entire spreadsheet, causing erroneous results. If that

spreadsheet calculates your client's financial statements, the lawsuit he or she may bring against you is a much greater risk than a misplaced doorway. The moral to the story: *never underestimate the importance of planning when creating a spreadsheet!*

Use the following steps to plan and develop a spreadsheet:

1. *Establish your objectives.*

Ask yourself why you are creating a spreadsheet. Is it to save time on lengthy calculations or to provide a regular template for a monthly report? By stating your objectives, you gain a better understanding of the requirements of the spreadsheet.

2. *Define the output requirements.*

Since the layout or structure of a spreadsheet is largely determined by the reports required, you should mock up the reports on paper before creating the spreadsheet on the computer.

3. *Construct the spreadsheet.*

Having completed your needs assessment in the previous steps, you construct the spreadsheet. Most spreadsheet users enter the known information first, whether text or numbers, and then create the formulas. This process allows you to see the results of a formula calculation immediately upon its entry.

4. *Test the spreadsheet.*

Testing involves performing manual calculations on separate parts of the spreadsheet and then comparing those values with the spreadsheet's results. Do not take it for granted that the spreadsheet calculations are correct. A simple typing mistake can cause numerous errors in a spreadsheet.

5. *Use the spreadsheet.*

A spreadsheet is often designed with unclear objectives, or the objectives may change after the spreadsheet is constructed. Therefore, the use and reuse of a spreadsheet is important for feedback toward enhancements and modifications. A spreadsheet is a dynamic tool; it must be updated and maintained to remain relevant.

6. *Document the spreadsheet.*

A spreadsheet can become quite complex. Proper documentation is essential, especially when the spreadsheet is used by several different people. Documentation consists of on-screen and paper instructions

specifying where and how information is to be entered and outlining the formulas used to perform calculations.

THE WINDOWS ADVANTAGE

This section explains some of the benefits and shortcomings of working in the Windows environment. **Microsoft Windows** is a software program that works with DOS to provide a **graphical user interface** (GUI) for programs. A graphical interface makes using computers easier and more intuitive. With Windows, you use a pointing device called a **mouse** to select from **icons** (pictures that represent programs or functions) rather than having to type lengthy commands.

Some of the advantages of working in the Windows environment include:

1. *Windows programs are easier to learn and use.*

Windows provides a standardized interface for all programs, whether they are word processing, spreadsheet, or database applications. As a result, you can use the knowledge acquired from one Windows product in working with other Windows products.

2. *The ability to run more than one application at a time.*

Windows is a **multitasking** environment whereby more than one application or program may be running at the same time. For example, multitasking allows you to simultaneously receive an electronic mail message, print a report from WordPerfect for Windows, and calculate a Quattro Pro for Windows spreadsheet.

3. *The ability to exchange information among applications.*

Windows provides a program called the Clipboard to copy and move information within an application or among applications. Because more than one application can be running at the same time, it is easy to copy a budget from a Quattro Pro for Windows spreadsheet to the Clipboard, and then paste that budget into a WordPerfect for Windows report.

4. *The ability to display on the screen what you will get from the printer.*

This feature is called **WYSIWYG** ("What You See Is What You Get"); it allows different fonts, borders, and graphics to be displayed on the screen at all times.

The primary disadvantage of working with Windows is that the program requires a powerful computer to maintain a reasonable processing speed. The minimum system requirements, from a practical point of view, are a 386-based computer with 4 MB of RAM and 6 MB of free disk space. Increasing the RAM memory and using a disk caching software utility program, such as SMARTDRV.EXE, can greatly improve performance.

WORKING WITH QUATTRO PRO FOR WINDOWS

Microsoft Windows and Quattro Pro for Windows are graphical programs. To fully appreciate their functionality, you should become familiar with using the mouse. Instructions in this guide generally list both the mouse and the keyboard methods for performing commands and procedures. You can try the instructions for each method and decide for yourself which you prefer. This section provides some general information on how the mouse and the keyboard are used in Quattro Pro for Windows.

HOW THE MOUSE IS USED IN QUATTRO




The mouse is an essential tool for working in the Windows environment. Although it is possible to use Quattro Pro for Windows with only a keyboard, much of the program's basic design revolves around the availability of a mouse. Although your mouse may have two or three buttons, Windows primarily uses the left mouse button for selecting items and commands.

The most common mouse actions used in Quattro Pro for Windows are:

- **Click** Press down and release the left mouse button quickly. Clicking is used to select a cell in the worksheet and to choose options from the menu or a dialog box.
- **Double-Click** Press down and release the left mouse button twice in rapid succession. Double-clicking is often used to select and execute a program. In Windows, double-clicking the Control menu of a window closes that window.

- **Drag** Press down and hold the left mouse button as you move the mouse pointer across the screen. When the mouse pointer reaches the desired location, release the mouse button. Dragging is used to select a group of cells or to move items or windows.

You may notice that the mouse pointer changes shapes as you move the mouse over different parts of the screen. Each mouse pointer shape has its own purpose and may provide you with important information. There are three primary mouse shapes that appear in Quattro Pro for Windows:

-  **arrow** — used to choose menu items, make selections from dialog boxes, and select cells and ranges
-  **hourglass** — informs you that Quattro Pro is occupied with another request and asks you to wait until it is finished
-  **cursor** — used to modify and edit data

As you proceed through this guide, other mouse pointer shapes will be explained in the appropriate sections.

HOW THE KEYBOARD IS USED IN QUATTRO

Aside from being the primary input device for creating a worksheet, the keyboard offers shortcut methods for performing commands and procedures. For example, several menu commands have shortcut key combinations listed to the right of the command in the pull-down menu. Therefore, you can perform a command by simply pressing the shortcut keys rather than using the mouse to access the Menu bar. Quattro Pro for Windows assigns several commands to function keys (Table 1.1). Many of these commands are explained later in the guide.

Table 1.1	<i>Key</i>	<i>Description</i>
Description of Function Keys (Partial List)	[F1] HELP	Press this key to activate the Help system.
	[F2] EDIT	Enables you to modify or edit an existing cell entry by changing to EDIT mode.