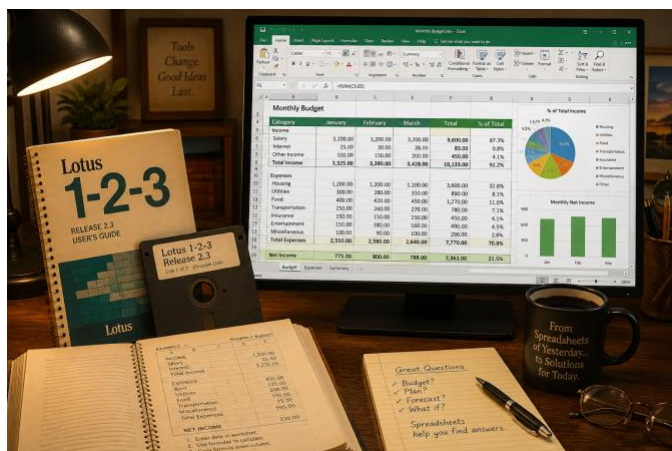




Spreadsheets for Everyone

Why They're Worth Learning

By Curtis Jerry Smothers

Don't Be Intimidated

If you've never used a spreadsheet before, don't let the rows, columns, and tiny boxes scare you away. A spreadsheet is simply a sheet of paper that can do the arithmetic for you. Once you've learned the basics, you'll probably wonder how you ever managed without one.

I wasn't always an Excel user. Like many longtime computer enthusiasts, I cut my spreadsheet teeth on the legendary Lotus 1-2-3 back in the early days of personal computing. At the time it seemed almost magical. Enter a few numbers, type a simple formula, and the computer instantly recalculated every total whenever you changed a value. That was revolutionary in an age when most calculations were still done with calculators and pencils.

Eventually Microsoft Excel became the industry standard. Along the way it acquired an astonishing collection of ribbons, menus, commands, functions, shortcuts, charts, pivot tables, and features that most of us will never use. Don't let that discourage you. Most everyday users rely on only a surprisingly small collection of tools.

More Than Just Mathematics

The real power of a spreadsheet isn't complicated mathematics. It's organization. Think of a spreadsheet as an electronic ledger. Each little box—called a *cell*—holds a piece of information. It might contain a number, a word, a date, or a formula. Cells line up into rows and columns that make even large amounts of information easy to read.

Unlike a handwritten ledger, every total updates automatically. Change the price of one item, and every subtotal, tax calculation, and grand total instantly adjusts itself. The spreadsheet never

complains, never gets tired, and almost never makes an arithmetic mistake. (It faithfully performs the instructions you give it—even when those instructions happen to be wrong!)

Spreadsheets Are Everywhere

Businesses use spreadsheets to prepare budgets, forecast sales, manage inventory, track payroll, and analyze profits. Teachers record grades. Coaches keep statistics. Scientists analyze experiments. Families track household expenses. Investors monitor retirement accounts. Gardeners plan vegetable plots. Even vacation itineraries often begin life as a spreadsheet.

One of the greatest strengths of a spreadsheet is that it grows with your needs. A beginner might create a simple monthly budget using only addition and subtraction. A more experienced user can build financial models involving hundreds of formulas spread across dozens of worksheets. Both users are working with exactly the same program.

Solving Everyday Problems

Perhaps the biggest surprise for many new users is discovering that spreadsheets aren't really about mathematics at all. They're about solving problems. They help answer questions such as:

- How much did I spend this month?
- Which investment performed best?
- What happens if prices increase by 10 percent?
- How many hours did everyone work?
- Which students are improving?
- What will my mortgage balance be five years from now?

Those answers appear almost instantly because the spreadsheet performs the repetitive calculations while you concentrate on making decisions.

You don't need to be a mathematician to master spreadsheets. Believe me—I never considered mathematics to be one of my strongest subjects either. Yet spreadsheets have become one of the most valuable tools in my computing toolbox. If they can make a "math-challenged" Navy administrator, writer, and teacher more productive, they can do the same for you.