Chapter 28

SOFTWARE OPTIONS

Depending on our needs and preferences, we have at least four choices for constructing knitting charts in the computer:

- specialty knitting chart applications
- drawing program
- spreadsheet program
- word processor

I know absolutely nothing about any of the various knitting apps that are out there, so I can't give pros and cons.¹ If we use a drawing program, we must first create symbols for each knitting operation we need to chart, then we make lots of copies of them and position each one on the page. But we don't all have a drawing program, and it can take quite a bit of time to learn how to use them efficiently.

A word processor and even a spreadsheet program, though, are likely to be on every-one's computer. Both of these programs also allow us to use the knitting font.

If we do any reading on the Internet, we'll quickly see that some people use a spread-sheet program to make their charts. That's great!

Unfortunately, I hardly ever use a spreadsheet, so I always have trouble remembering how to make a chart, especially a multi-page chart, print the way I want. If you want specifics about manipulating a spreadsheet, you'll have to find that information elsewhere.

Even so, the material in this chapter and elsewhere in the book will still mainly apply, because you'll still be typing with the knitting font; you just have to tweak the directions to do the equivalent actions in a spreadsheet.

In my word processor, which I use nearly every day, I can set my page size, orientation, and margins quickly, so I know exactly how the chart will print. I also define custom styles to eliminate constant manual formatting, and it's easy to combine the charts with plain text, like the pattern name, the book it came from, and any special instructions or reminders.

Within a word processor, there are three ways to organize the knitting symbols and row numbers.

Method 1: Regular Lines

The charts in "Basic Knitted Fabrics" (chapter 1) and small charts in later chapters used this technique.

¹ I would almost certainly feel too constrained by them, and I probably wouldn't like their symbols either.

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I typed the symbols corresponding to the stitches, putting a space between the stitch symbols and the row numbers. The lines are formatted to be centered on the page, though that's a matter of preference; having all the lines against the left (or right) margin would work just as well.

There is one main problem, though, with this technique. We, you and I, have to use spaces to keep the stitch symbols aligned with respect to one another. Let's look at what that means.

The Stockinette Chart

The stockinette chart showed four rows of ten knit symbols, with the row numbers at the proper places for public- and private-side rows. For row one I typed two spaces, ten k characters, a space, and the number one.²

··kkkkkkkkkk1

When I change that line to the knitting font, the result is

1

The remaining three lines are done similarly.

4 · kkkkkkkkk · ·

···kkkkkkkkkk.3

2 · kkkkkkkkk · ·

Combining all four Courier lines shows what I actually typed.

4 · kkkkkkkkk · ·

··kkkkkkkkk.3

2 · kkkkkkkkk · ·

··kkkkkkkkkk1

When I change these lines to the knitting font, the stockinette chart becomes what we expect.

4		Ш		
				3
2				
				1

² The Courier lines in this chapter, representing the characters I had to type, look the way they would in a word processor if hidden characters were made visible. I had to substitute a centered dot • for all the spaces to make them "appear" here on paper.

This technique is fine for small charts.

The Problem: Keeping Everything Aligned

The biggest drawback is that you and I, and not the computer, have to go to some effort, via all those extra spaces, to keep the rows aligned horizontally. If lines one and three don't start with two spaces and if lines two and four don't end with two spaces, the resulting chart is not very helpful, since the symbols are not positioned properly with respect to one another.

4					
					3
2					
					1

The fact that the lines happen to be centered instead of being against the left margin makes no difference in whether the symbols are lined up properly with one another or not. Without the spaces filling in for all the "missing" row numbers (private-side row numbers on public-side rows, and vice versa), the symbols will never be in their proper relationships to the symbols below and above them.

For a four-row chart like this one, having to add a few spaces to one end of all four lines isn't that big a deal, and frankly, having typed up so many small charts, I include the spaces more or less automatically, without even thinking about it.

But if I'm doing a big chart, with dozens of rows, then using regular lines can get a bit unwieldy. If we want to combine lots of stitch patterns across the width of a project, like we did in the Aran sampler, well...I won't say it's *impossible* to do so on ordinary lines.

That's why I do charts of any size in tables.

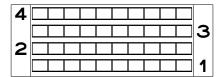
In earlier chapters that showed tables in action, each pattern row was in its own table row. But there is a different way of using tables, and that technique is putting **all** the pattern rows in a **single** table row.

Method 2: All Pattern Rows in One Table Row

In this method, we still use a table with three columns. The left column still holds the private-side row numbers, the middle column still holds the stitch symbols, and the right column still holds the public-side row numbers.

But the difference is that we put **all** the pattern rows in a **single** table row.

Here's the same stockinette chart, with the proper symbols in each column.



This method may seem easy, especially compared to the multi-row table that requires constantly adding new rows and using the Tab key or mouse to move around, but it has a catch. Let's look at the stockinette chart with the hidden symbols made "visible."³



The Problem: Keeping Everything Aligned

In this method, we must have a hard line break, represented by the pilcrow (the paragraph symbol ¶) and made by pressing the Enter key, at the end of every pattern row in the middle column. The hard line break forces each pattern row to be on its own line within the single table cell.

We also have to put an **extra** line break after each number in both columns of row numbers. That extra line break forces a blank line between the row numbers, because each column has only half of the row numbers.

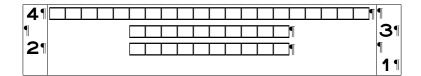
For the column of public-side row numbers, we must also have an extra line break at the **top** of the column, so that all the public-side row numbers are pushed down one row, to put them in the right places relative to the pattern rows and private-side row numbers.

If a Line Break Is Missing

What happens if we accidentally delete the line break at the end of any of the rows (either the pattern symbol rows or the row numbers)? Well, nothing. Until we, or the word processor, resizes either the whole table or just the column with the missing line break. Then the table changes, and not for the better.

In the next chart, the hard line break at the end of pattern row four was deleted, which makes the word processor think the top pattern row is now twenty stitches wide. If we or the word processor resizes either the middle column or the entire table, it will try to make the middle column wide enough to show all twenty symbols on a single line.

³ Again, I had to do some convoluted stuff to make the pilcrows "visible" here in the book.



Whoops! If you are charting along with the book and this happens to you, do not panic!

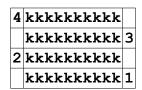
The fix is easy. Click between the last stitch of pattern row four and the first stitch of pattern row three, and press Enter to put a hard line break back in. Unless you count the symbols, it's easy to put the line break in the wrong place. So press Backspace, move the cursor to the correct place, and press Enter. Then resize the middle column or the whole table again.

It's **very** easy to delete or misplace a line break when we select, copy, and paste rows. If we choose to use this option, then we'll probably want to keep hidden symbols visible (usually by simply pressing the ¶ button in a toolbar or by choosing a menu item like View | Hidden Symbols).

Actually, this is just a symptom of the real problem, which is that **we**, **you and I**, **are still having to do all the work to keep the symbols aligned properly**, but this time, we're aligning **vertically** by using lots of hard line breaks.

Method 3: Each Pattern Row in Its Own Table Row

The chart for the small swatch of stockinette needs a table that is three columns wide and, eventually, four rows tall. We can usually create the table with just a single row, then let the word processor add a new row when we press Tab while in the last cell of the bottom row. After we finish typing all the knitting symbols and row numbers, we have the following table if the font is Courier.

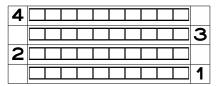


Everything Stays Aligned Automagically

There are absolutely no spaces anywhere in this chart, because the empty table cells perform the function that the spaces did when the chart was typed on regular lines.

Nor do we have to use hard line breaks to keep all the pattern rows and row numbers in the correct places vertically. Each cell, whether it contains a row number or the pattern symbols, will stay in its proper place relative to everything else. The empty cells simply remain empty.

When we switch the table above to the knitting font, the chart takes on its familiar form.



With each thing in its own table cell, the alignment stays correct both horizontally and vertically without any extra work on our part. It does take a bit more work setting it up, but that bit of extra work up front saves a whole bunch of fiddling later on.

This technique also makes it easy to combine patterns, like we did for the Aran sampler, that would cause a lot of swearing and hair-pulling if we tried to make that chart with either plain lines or a single-row table.

Comparing the Three Methods

Let's look at the pros and cons of the three ways to use a word processor.

	Regular Lines	One-Row Table	Multi-Row Table
Pros	easy to enter symbols: just type good for very small or single-pattern charts	easier set-up than a multi- row table each part of the written- out instruction goes in its own column, so it's easy to combine, move, and delete patterns across a project's width	horizontal and vertical alignment are automatic easy to select exactly what you want without having hidden characters showing
Cons	nearly impossible to combine small patterns across the width of a larger project must have extra spaces to keep horizontal alignment	must have extra line breaks to keep vertical alignment must select pilcrow when copying a line must paste after a pilcrow, not before it	requires more work to set up if we create enough table rows at the start (but usually we can create just one row)

For a small item like the purl diamond sampler, using regular lines to make the chart is quick and easy. Rectangular projects, and even ones with regular decreases and increases like

mitten fingertips and sock toes, can also be typed up quickly on regular lines. But if we tried to combine the various Aran patterns on regular lines to make a project chart, especially if we were undecided which patterns we wanted or the order we wanted them across the width of the project, there will be no end of difficulty keeping each pattern's rows together as we try to shuffle the patterns around.

For both table options, multiple columns allow us to combine small patterns easily across a project's width. We simply put each pattern in its own column, which lets us rearrange them left and right, duplicate them, or manipulate them in any other way, since we can select each pattern's column individually.

But having to keep up with all the extra hard line breaks will require some careful clicking and dragging with the mouse to make sure we grab the line breaks along with the actual stitch symbols if we need to, say, copy a four-row pattern to paste two copies of it to match up to a twelve-row pattern.

But if each pattern row's symbols and line numbers are in their own table cells, it's very easy to see exactly what we're selecting if we need to copy, delete, or move anything.

My Preference May Not Be Yours

To me it's tidiest to put each part of each pattern row in its own table column and row in a word processor.

You may prefer to put all pattern rows in a single table row or even to use regular lines in your word processor.

Or you may prefer to use a spreadsheet.

Or any of the charting apps available on the Internet

Or a pencil and graph paper, using either symbols of your own design or adaptations of others'. You can also chart on regular graph paper that has square grid cells, or you can create knitter's graph paper as described in chapter 2, "Charting on Paper" (you can also create a proportioned grid with a word processor table as described in appendix F, "Designing by Charting").

You may even prefer to use some kind of drawing program using little symbols you designed yourself.

Whatever works best for **you** is the technique **you** should use. There's no one "correct" way to chart, in exactly the same way that there's no one "correct" way to knit. If you get the result you want, then you're doing it right, even if you're the only person on the planet who charts (and knits) the way you do.