WHY I USE MULTI-ROW TABLES IN A WORD PROCESSOR

There are two different computer programs we can use to chart with the knitting font. We can use a spreadsheet, or we can use a word processor.[1]

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

Unfortunately, I hardly ever use a spreadsheet, so I always have trouble figuring out 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 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 a 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 and the book it came from.

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

Option 1: Use Ordinary Lines

The charts in chapter 110 used this technique.

I typed the symbols corresponding to the stitches, putting a space between the pattern stitches 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 either 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 stitches, with the row numbers at the proper place for public- and private-side rows. For row one I typed two spaces, ten k characters, a space, and the number one.[2]

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[1] Of course, I'm simplifying the picture a bit. Here I'm limiting the discussion to the simplest programs that most people have used before and that can use the knitting font.

[2] In this chapter, I had to do some fiddling to make hidden characters "visible."

··**kkkkkkkkk·1**

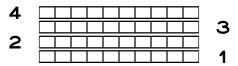When I apply the knitting font to that line, the result is

☐☐☐☐☐☐☐☐☐☐   **1**

The remaining three lines are done similarly.

4·kkkkkkkkk··
··kkkkkkkkk·3
2·kkkkkkkkk··

Combining all four lines in Courier shows what I actually typed.

4·kkkkkkkkk··
··kkkkkkkkk·3
2·kkkkkkkkk··
··kkkkkkkkk·1

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

4 ☐☐☐☐☐☐☐☐☐☐
☐☐☐☐☐☐☐☐☐☐ **3**
2 ☐☐☐☐☐☐☐☐☐☐
☐☐☐☐☐☐☐☐☐☐ **1**

This technique is fine for small charts like this.

The Problem: Keeping Everything Aligned

But 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 stitches 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 stitches are lined up properly or not. Without the spaces filling in for the "missing" row numbers (private-side row numbers on public-side rows, and

vice versa) on each row, the stitches will never be in their proper relationships to the stitches below and above them.

For a four-row chart like this one, having to add a few spaces to one end of each line isn't that big a deal, and frankly, having typed up so many small charts, I add 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 ordinary lines can get a bit unwieldy.

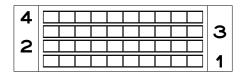That's why I do charts of any size in **tables**.

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.

Option 2: Put 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 stitches themselves, 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 information 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 "visible."

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

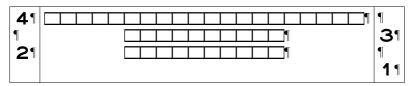column. The hard line break forces each pattern row to be on its own line within the single table cell.

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 either the public side or the private side.

For the column of public-side row numbers, we must also have an extra line break at the **top** of the column, before the first row number, 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 one of the line breaks 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 you or the word processor resizes either the middle column or the entire table, the middle column will be made wide enough to show all twenty stitches on a single line.

Whoops! If you are experimenting with this technique 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. Then resize the middle column or the whole table again.

It's **very** easy to lose a line break when you select, copy, and paste rows. If you choose to use this option, then you'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** are still having to do the work to keep everything aligned, but this time, we're aligning **vertically** by using extra line breaks.

Option 3: Put 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.
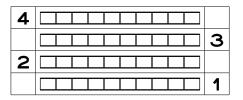
4	kkkkkkkkk	
	kkkkkkkkk	3
2	kkkkkkkkk	
	kkkkkkkkk	1

Everything Stays Aligned Automagically

There's absolutely no need to put any spaces anywhere in this chart, because the empty table cells perform the function that the spaces did when the chart was typed on ordinary 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 can just remain empty.

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

4	▭▭▭▭▭▭▭▭▭▭	
	▭▭▭▭▭▭▭▭▭▭	3
2	▭▭▭▭▭▭▭▭▭▭	
	▭▭▭▭▭▭▭▭▭▭	1

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.

It also makes it possible 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:

- 🧶 using plain lines
- 🧶 using a single-row, multi-column table
- 🧶 using a multi-row, multi-column table

	Regular Lines	One-Row Table	Multi-Row Table
Pros	easy to enter symbols: just type	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	horizontal and vertical alignment are automatic easy to select exactly what you want without having hidden characters showing
Cons	difficult to combine small patterns across the width of a larger piece must have extra spaces to keep horizontal alignment	must have extra line breaks to keep vertical alignment must select pilcrow when copying a line	requires more work to set up if you create enough table rows at the start (but usually you can create just one row)

For a small project like the purl diamond, using ordinary lines to make the chart would be 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 ordinary lines to make a project chart, especially if we were undecided which patterns we wanted or the order we wanted them across 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. 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 line breaks will require some careful clicking and dragging with the mouse to make sure we grab the line breaks along with the actual knitting symbols if we need to copy, say, a four-row pattern to add two copies 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 tidier to put each part of each pattern row in its own table column and row in a word processor.

You may prefer the option to put all pattern rows in a single table row or even to use ordinary lines.

Or you may prefer to use a spreadsheet.

Or a pencil and graph paper.

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

Charter's choice.