

Chapter 26-P

MORE CHARTING TIPS FOR MIKS

I've used many of these ideas (well, their computer equivalents) at one time or another (and usually wished I'd thought of them sooner). We shouldn't be afraid of thinking outside the box to test new techniques!

If we want to try something crazy but still be able to recover easily if it doesn't work, we need to do the crazy thing on a separate copy of the chart: make a couple of photocopies and play around with them instead of the original.

My Charting Goal

I will do just about anything to squeeze my chart down so it fits on one side of a single sheet of paper—or, more accurately, so that the **width** of my chart fits on one side of a single sheet of paper. Why? For the very practical reason that I use a steel board and magnets to hold my chart and mark my place, and the board is the size of a sheet of paper. If the chart width, which really means the full width of the project's rows, doesn't fit on one side of a sheet, then I have two choices:

- 🌀 Remove the magnets, turn the sheet over, and re-position the magnets twice for every row (and hope I remember to mark the correct row during the process).
- 🌀 Use more than one sheet for each row, which is awkward in its own way. It's not very portable for knit night, and at home, even if I had more chart holders, it would be hard to fit them all on the table by my end of the couch.

Sometimes I have to do a bit of extra work to get the chart width down to one sheet, but the time spent on the chart more than makes up for the time saved with needles and yarn in hand.

Note that we can use as many pages as necessary to show additional **rows** without any issue. We finish the rows on page one, put page one aside, and start page two. The main problem is fitting the full width of the rows on one page.

More Tricks for the Website

If we use the website discussed in part one's "Charting on Paper" to make the base grid for our charts, there are two things we can do to try to fit the entire chart on one side of one piece of paper:

- 🌀 play with the Reduction
- 🌀 swap the stitch and row gauges

Use a Reduction

The Reduction setting keeps the proper proportions of our two gauges while compressing the grid to put more cells on the page.

With the “1/1” default value, we get a life-size grid. Each cell will be the same size as our actual stitch in yarn. Changing the Reduction to “1/2” will make a grid with twice the number of columns and rows, and setting it to “1/4” creates four times the columns and rows. (There’s no way to get more columns but the same number of rows, or vice versa. The Reduction always applies to both columns and rows.)

The PDF will still have thicker vertical lines based on the Sts value and thicker horizontal lines based on the Rows value. At the “1/2” Reduction, the dark squares’ sides will be two inches long on the printed PDF; if we use “1/4” for the Reduction, the dark squares on the print-out will measure one inch on each side. In both cases, each dark square will still represent a piece of fabric that’s four inches square.

If setting the Reduction high enough to give us the number of grid cells we need makes the cells too small to easily draw the chart, and especially to work from it, we can use a smaller Reduction, print out several copies of that PDF, trim them, then tape them together. Depending on the project, you might be able to draw the chart in several pieces to fill in the blank areas of each sheet, then do cut-and-tape.

Faking an In-Between Reduction

What if we need a Reduction that’s not in the list? Depending on the project and our gauges, we might want a Reduction that would be represented in the list by “1/1.5” or even “1/2.75.”

In cases like these, we use the default Reduction of “1/1” while we change the numbers we put in the Sts and Rows boxes.

For a Reduction of “1/1.5”

If we need the number of stitches and/or rows that a Reduction of “1/1.5” would give, we multiply the values of both the Sts and Rows by...1.5. At our example gauges of twenty stitches and twenty-eight rows per four inches, then if we need a grid halfway between life-size and twice life-size, we multiply twenty stitches by 1.5, so we put “30” in the Sts box, then we multiply twenty-eight rows by 1.5 and put “42” in the Rows box.

For a Reduction of “1/2.75”

You can probably guess how this one works. Leaving the actual Reduction value as “1/1,” we multiply the numbers in the Sts and Rows boxes by 2.75. At our example gauges, we use “55” for Sts and “77” for Rows.

A Slight Hitch When Faking Reductions

Since the PDF draws the dark lines after each interval of the number of stitches and rows put into the two boxes, the dark squares measure four inches square on **paper**, but they do **not** represent **fabric** that is four inches square.

Just as we had to multiply the Sts and Rows values by the in-between Reduction factor we wanted to fake, the dark squares will likewise indicate squares of knitted fabric whose sides measure four inches times our fake Reduction factor.

So faking a “1/1.5” Reduction means the dark squares on the PDF measure four inches times 1.5: six-inch squares of fabric. When we fake a Reduction of “1/2.75,” the dark squares portion out the knitted fabric in squares that are four inches times 2.75, or eleven inches, on each side.

Swap the Stitch and Row Gauges

What would happen if we reversed the two gauge values, putting the row gauge in the Sts box and the stitch gauge in the Rows box?

At twenty-eight “stitches” and twenty “rows” per four inches, the number of stitches in the PDF will be almost the same as the number of rows, which could be exactly what we want in some projects. At the default “1/1” Reduction, the PDF has fifty-three stitches and only fifty-six rows. We get a hundred and six stitches and a hundred and twelve rows if we use the “1/2” Reduction.

We still get the dark squares that all represent a square of fabric measuring four inches by four inches, no matter what Reduction we use.

When we work from such a chart, we of course have to turn the page to landscape.

Showing Additional Dark Squares

We can trick the website into drawing squares around each square inch of fabric or around squares that are two inches by two inches.

- 🌀 For one-inch squares, we put in the number of stitches and rows in one inch, then set the Reduction to “1/4” for life-size grid cells.
- 🌀 For two-inch squares, we use the number of stitches and rows in two inches with the Reduction “1/2” for life-size grid cells.

If we want to cram more cells on the page for either option, we select one of the larger Reduction ratios.

Fitting a Chart on One Side of One Sheet of Paper

Let's start with the most extreme project and chart shapes.

If We Need a Really Tall Chart

Suppose we want to chart a scarf pattern that's longer than the number of rows on our grid paper. If the chart is narrow enough, we can put two sets of rows on a single sheet of paper, filling in the blank areas on each page.

If the chart is more than half the width of the paper, we can turn the page to landscape to see if that gives us enough space to fit two columns on the page. If not, then we just have some blank areas. Yes, we'll need more pages to show all the rows of the full chart, but the entire width of each row fits on the page, which is the really important part.

Working from the Chart

We work rows one through forty-four from the left portion of the chart while we ignore the right portion. Then we work rows forty-five through eighty-eight from the right portion while we ignore the left portion.

If seeing both parts of the chart at once is too distracting, then we put the second half of the chart on the other side of the paper or on a separate sheet. We could also just fold the sheet in half.

Very Skinny Scarf									
43		44	87					88	
41		42	85					86	
39		40	83					84	
37		38	81					82	
35		36	79					80	
33		34	77					78	
31		32	75					76	
29		30	73					74	
27		28	71					72	
25		26	69					70	
23		24	67					68	
21		22	65					66	
19		20	63					64	
17		18	61					62	
15		16	59					60	
13		14	57					58	
11		12	55					56	
9		10	53					54	
7		8	51					52	
5		6	49					50	
3		4	47					48	
1		2	45					46	

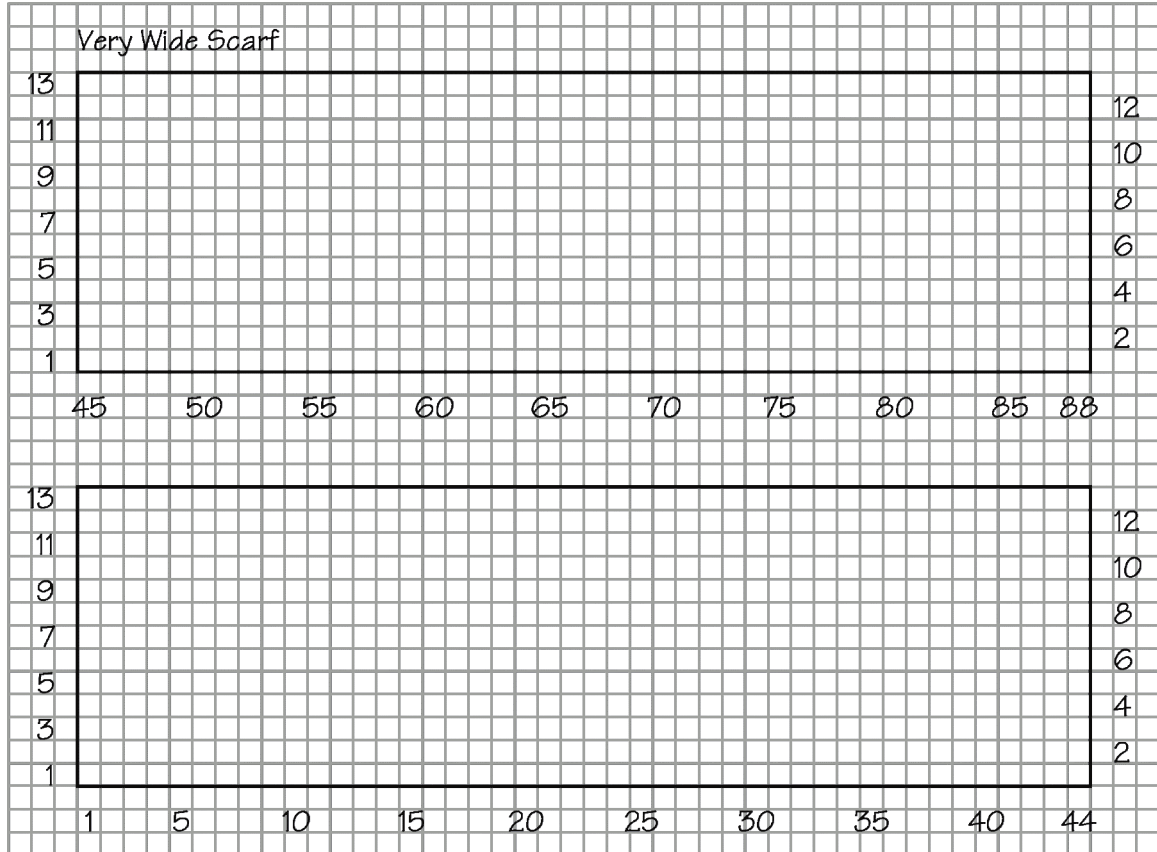
If We Need a Really Wide Chart

Sometimes we need a super-wide chart, like for a scarf worked end to end instead of side to side. This situation is trickier to fit on one sheet, simply because of the number of symbols we need to show. But we have some tricks we can use here too.

The very first thing to do is, of course, turn the page to landscape. That gives us more room in the direction we need it. But even that won't be enough for moderately wide pieces.

If we're close, we can use legal paper turned landscape, which gives us another extra three inches. But part of the chart will flop over the edge of a letter-size chart holder. Sigh.

In some cases, therefore, we have to split the rows into pieces (and hopefully only two pieces).



Working from the Chart

In the very wide scarf's chart, **each project row is split in half**. Based on the stitch numbers, the lower portion of the chart is the left half of the piece, and the upper portion is the right half. On public-side rows, we work from left to right in the bottom part, then we work from left to right in the top part.

Private-side rows reverse all the directional and location words: we work from right to left in the top portion, then we work right to left in the bottom portion.

If, however, we flip the chart upside-down for the private side, then we read the rows the same way as for the public side: left to right in the "bottom," then left to right in the "top." We must then flip the chart right-side up for the public-side rows.

While we could have put each half of the very skinny scarf's chart on its own side of the paper without any problem, if we did that for the very wide scarf, we'd have to flip the paper

over every time we got to the middle of each row and when we began the next row. No, thanks!

But, sometimes we simply cannot fit the chart's width on a single sheet of paper.

When One Sheet of Paper Isn't Enough

If we're combining lots of small patterns across the width of a big project, like a sweater or blanket, it would be nice to see the entire chart at once. That way we can compare the effect of having this pattern here and that pattern there.

Sometimes a project has a single design that's just big. Imagine a colorwork chart made from a **photograph** (and here's an even **bigger one** if you're a Ravelry member) or a combination of textures that forms an **image**. Since there's no repetition, we have to show the entire huge chart.

Chart Small Patterns Separately

If we're playing around with lots of little patterns, we can chart each one on its own vertical strip of grid paper, then rearrange them to our hearts' content. Once we decide on the final order, we tape them together.

Non-Repeating Charts

If the design is just a single, very large one, we can trim off two edges of several sheets of grid paper, then tape them together on the back side while we draw the symbols. Once we're done drawing, we may want to detach them from one another to work from them.

If we're designing, we should create proportional grid paper, which will allow us to match the proportion of the height and width of the finished object. If we're charting an existing project, which will already have the proper ratio of stitches and rows, we can use either proportional or square-cell grid paper.

Label Multiple Sheets the Better Way

Suppose we need several pages to chart the entire width of a project when we've made the grid as small as we can work from. We need to be careful to label each page of the chart with, at the very least, the correct row numbers and stitch labels; numbering the pages themselves wouldn't be nearly as useful, as we might not be able to tell (or, six months later, remember) if page three goes beside page two or above page one. If we're combining stitch patterns, we can include those names too for a sanity check.

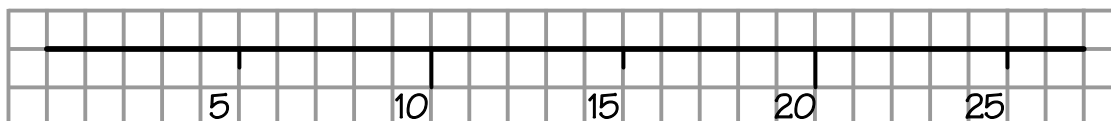
The following "paper" chart has been split into two "pages," represented by the thick

	Patt 1	Patt 2	Patt 3	Patt 4
19				
17				
15				
13				
11				
9				
7				
5				
3				
1				
	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16

	Patt 5	Patt 6	Patt 7	Patt 8
19				
17				
15				
13				
11				
9				
7				
5				
3				
1				
	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32

It can be very handy to identify all the stitches in a project with either letters or numbers. Depending on how many stitches there are, how many small patterns have been joined together, and how many stitches we have on DPNs, magic/traveling loop, or multiple circls, we might need to label them differently.

The labeling we choose will depend mainly on how big the cells are on our grid paper. If they're pretty small, we might only be able to put a single digit in every tenth cell (so a "1" in the tenth cell, a "2" in the twentieth, and so on). We could just draw a longish vertical line between each ten-stitch group, with shorter lines marking off the halfway point of each group of five. We could then number just the longer lines or all of them.



If the cells are larger, we might number just the odd- or just the even-number stitches, or we might be able to label the first twenty-six grid cells with lowercase letters, then the next twenty-six with uppercase, then continue to alternate between the two all the way across.

If the grid cells are quite large, we could use consecutive numbers in every grid cell below the stitch symbols, though doing every other cell would need less effort, might look less busy, and may be easier to read.

Substitute Numbers Strategically

Suppose we had a public-side chart row that looked like this:

Quick! How many knit stitches are there in the two groups between the three purl stitches?

If the project is small, it might not matter much, but on a larger chart it would be convenient to put in the chart the number of stitches in a run of the same stitch.

This way, we do our counting one time, and it's recorded forever in the chart. When we've worked the first purl stitch, we can immediately work nine knit stitches (without first having to count the number of cells on the chart), purl one, then immediately knit eight (again without counting them first on the chart). Altering the chart this way would save some time and hopefully lead to more accurate knitting.

If we have ten or more of the same stitch

A horizontal number line is shown, ranging from 0 to 100. A vertical line is drawn at the number 9. Dots are placed at every integer from 0 to 100, including 9. The number 9 is written to the left of the dot at 9.

we can replace one or two stitch symbols, depending on how small we have to write.

[illegible]

Instead of trying to draw thick borders between small grid cells, we can use blank columns and rows to indicate the boundaries of a pattern repeat.

If the grid cells are not very small, then depending on the stitch symbols we need along any edge of a stitch pattern, we may be able to just draw over the appropriate grid lines, whether with a colored marker or pencil, or with an ordinary pen. But we have to make the boundaries easy to see while we're knitting while at the same time not overlapping any of the symbol markings.

Suppose we're making a sweater that has, among other patterns, both Braid and the Hugs and Kisses Cable. To help us keep things straight, we've put on our needle a green marker before each Braid and a pink marker before each Hugs and Kisses Cable. Now wouldn't it be nice if our chart did the same thing? It can.

- 🌀 We could fill in the entire column of a stitch pattern with the color, so columns of Braid would be green, and columns of Hugs and Kisses would be pink.
- 🌀 We could just run a line of green down the left edge of every column of Braid and a line of pink down the left edge of every column of Hugs and Kisses.
- 🌀 If we want a slightly wider line of color, we could color in, say, the first one or two stitches of each pattern column.

In part two's "Long Instruction Lines," there are suggestions for using color in a chart to represent how many times we work a repeating group.

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Show Needle Intersections

If we're using DPNs, magic/traveling loop, or several circs to make an item in the round, we can use blank columns in the chart at the places where the needles intersect or the loops stick out.

Putting needle intersections at strategic spots is a handy way to mark the beginning of a pattern repeat, the start of a different stitch pattern, or the beginning and midpoint of the round.