

## Chapter 20-P (MIK)

# BOTTOM-UP SHAPING (PAPER) MIK SUPPLEMENT

As a mirror-image knitter, you must always remember the unwritten assumption that public-side rows will be worked right to left. Your first step, therefore, must be to chart written-out instructions as though you were a traditional knitter, using all the techniques described in “Bottom-Up Shaping: On Paper.”

### Overview of MIK Changes

Once you complete the traditional knitter chart, you use the techniques in this supplement to make those few changes necessary to account for the fact that you work all rows in the opposite direction compared to traditional knitters.

#### *Swap Row Numbers and Reverse Stitch Labels*

One optional change is to move both sets of row numbers. Since you work public-side rows from left to right, your public-side row numbers ought to be at the left edge of the chart. The private-side row numbers ought likewise to be at the right edge of the chart. This pair of changes actually abides by one of our earliest charting rules, that the row number is always next to the first stitch worked on each row.

Should you need to refer to the written-out instructions, remember that you charted the rows as traditional knitters would work them. If you need to double-check your chart row thirteen with its instructions, you need to look at the chart row from right to left.

The second optional change is reversing the stitch labels. If the chart labels its stitches, you can run them in the opposite direction, so that stitch one or stitch A is at the left edge of the chart.

Even though both of these changes are optional, it will be easier to make the mandatory changes if you do them. The charts in this supplement show these changes to make all the explanations as clear as possible.

#### *Re-Define Decreases in the Symbol Key*

When traditional knitters work a K2tog, their resulting stitch leans to the right. Their resulting stitch from an SSK (or SKP or similar) will lean to the left.

Because you approach from the other direction the pair of stitches that will be involved in a decrease, you must work the opposite decrease to get the resulting stitch to lean the correct way. So for you, a K2tog is a left-leaning decrease and an SSK (or SKP or similar) is

right-leaning. The **chart** doesn't change; the symbols, and the resulting stitches, still need to lean in the same direction. What changes instead is the **definitions** in the symbol key, where the knitting operations you'll do for left- and right-leaning decreases are reversed.

You will chart a "K2tog" in written-out instructions as right-leaning, but when you get to the chart symbol in needles and yarn, you'll work an SSK (or SKP or other right-leaning decrease). SSKs (or SKPs or similar) in the instructions are charted left-leaning, but with needles and yarn, you'll work K2togs for those chart symbols.

If there are directional purl decreases made on the private side of stockinette, they also must be charted as for traditional knitters, so P2togs must be charted as right-leaning and SSPs (or SPPs or similar) as left-leaning. You will reverse these symbols' private-side definitions as well.

Purl decreases made on the public side of reverse stockinette can all be done as P2togs, since we won't be able to see which way the resulting stitch leans.

### Charting Rules for Mirror-Image Knitters

When MIKs chart written-out instructions, every "K2tog" must be charted as right-leaning and every "SSK" (or "SKP" or similar) as left-leaning. Once the chart is complete, MIKs change the symbol key to define a left-leaning decrease as a K2tog and a right-leaning decrease as an SSK (or SKP or similar).

If the written-out instructions have purl decreases worked on the private side of stockinette, MIKs chart each "P2tog" as right-leaning and each "SSP" (or "SPP" or similar) as left-leaning. In the symbol key, the left-leaning decrease would be defined as a P2tog and the right-leaning as an SSP (or SPP or similar).

### *Cable Needle Placement for Cables and Twists*

As with directional decreases, the cable and twist symbols in the chart slant in the proper direction, so nothing changes until you get to the cable symbol in needles and yarn. Since you approach the cable's stitches from the left instead of the right, you must put the cable needle to the opposite side of the work compared to traditional knitters.

Traditional knitters get a left cable by holding the cable needle to the front. You, how-

ever, must hold it to the back. To get a right cable, traditional knitters hold the cable needle to the back, so you must hold it to the front.

If you have to cross cables on the private side, you still hold the cable needle to the back for a left-slanting cable and to the front for a right-slanting cable.

### Charting Rule for Mirror-Image Knitters

To get the correct slant in a cable or twist, MIKs must put the cable needle to the opposite side compared to traditional knitters. Therefore, MIKs put the cable needle to the front for a right-slanting cable and to the back for a left-slanting cable, whether the cable is crossed on the public or private side.

See part one's "Cables and Twists" and the appendix "Crossing Cables on the Private Side" for more details. "Cables and Twists" includes mnemonics to help you remember these changes.

### *Shift the Shaping*

Because you work the rows in the opposite direction from the way they need to be charted initially, the chart as drawn indicates that all bind-offs are done at what are now the **ends** of your rows, public side and private side.

To move the bind-offs to the beginning of your rows, you need to shift left-edge bind-offs down one grid row and right-edge bind-offs up one grid row.

Decreases on each edge would also shift the same direction. The left edge's shaping all moves down one grid row, and the right edge's shaping all moves up one grid row.

### There's a Big Difference

It's important to note that the directions of these shaping shifts refer to the **edges of the chart itself**, not to the edges of the garment as it's worn. The rules do **not** say that the edge shaping of the chart at the **wearer's** left is shifted down one grid row and that the edge shaping of the chart at the wearer's right is shifted up one grid row. When you're shifting the shaping, the only "left" and "right" that matter are the **chart's left and right edges** as you're looking at it.

## Charting Rule for Mirror-Image Knitters

MIKs must move shapings in the left portion of a traditional knitter chart down one grid row, to put them at the beginning of MIK public-side rows. The shapings in the right portion of the chart must move up one grid row, to the beginning of MIK private-side rows.

In “Bottom-Up Shaping: On Paper,” since the left edge was charted as the beginning of private-side rows according to the unwritten assumption, the bind-offs charted on what is the second row of the underarm shaping for traditional knitters need to move down so that they appear on your row one.

In the same way, the beginning of public-side chart rows for traditional knitters have now become the beginning of private-side chart rows for you. So the underarm bind-offs charted at the beginning of the traditional knitter’s row one of the underarm shaping need to be moved up one row, since that underarm’s first shaping row is now your first private-side row.

### *The Interesting Outcome*

When you’ve made all of these changes, you’ll be able to talk in detail with traditional knitters working from their version of the same chart, in the exact same way we saw in part one’s “The No-Stitch Symbol.” You’ll bind off the exact same stitches on the exact same rows, you’ll work the exact same decreases on the exact same stitches, and you’ll get the exact same slant in cables and twists.

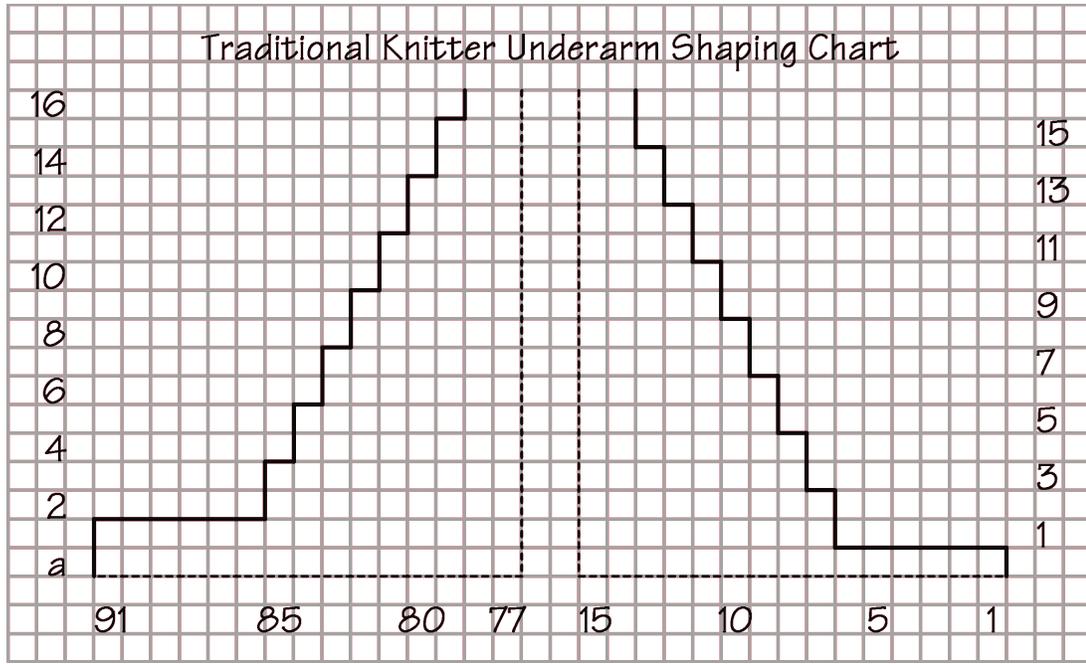
## Shifting the Shaping, Step by Step

Once you’ve completed the chart as though you were a traditional knitter, you have to alter which rows the shaping occurs on. You still bind off at the beginning of the row, just like traditional knitters, but the rows now begin on the other edge of the chart. The horizontal lines indicating bind-offs are initially located on the end of your rows. Decreases at the beginning of the traditional knitter underarm curve rows are now at the end of your rows.

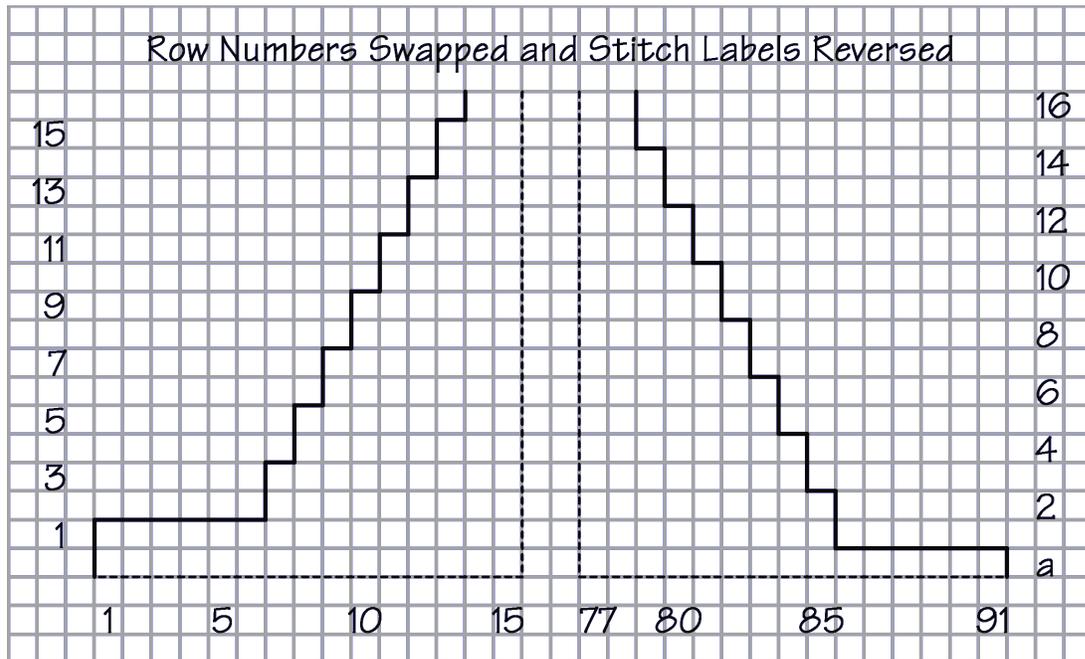
### *Underarm Shaping*

Here’s the traditional knitter chart of the underarm shaping for “The Basic Vest” in the size small. Traditional knitters would use this chart as is, including, of course, stitches sixteen through seventy-six on their needles. You must as your first step create this chart. (The de-

crease symbols have been omitted to reduce clutter, since the boundary lines show where to decrease.)



In this supplement, we'll always make the optional changes that swap the row numbers and reverse the stitch labels. Note that all the row numbers stay on the same **grid** row as before; all that changes is which **edge** of the chart they're on.



If it wasn't clear before, we now see explicitly that the boundary lines are not in the proper places.

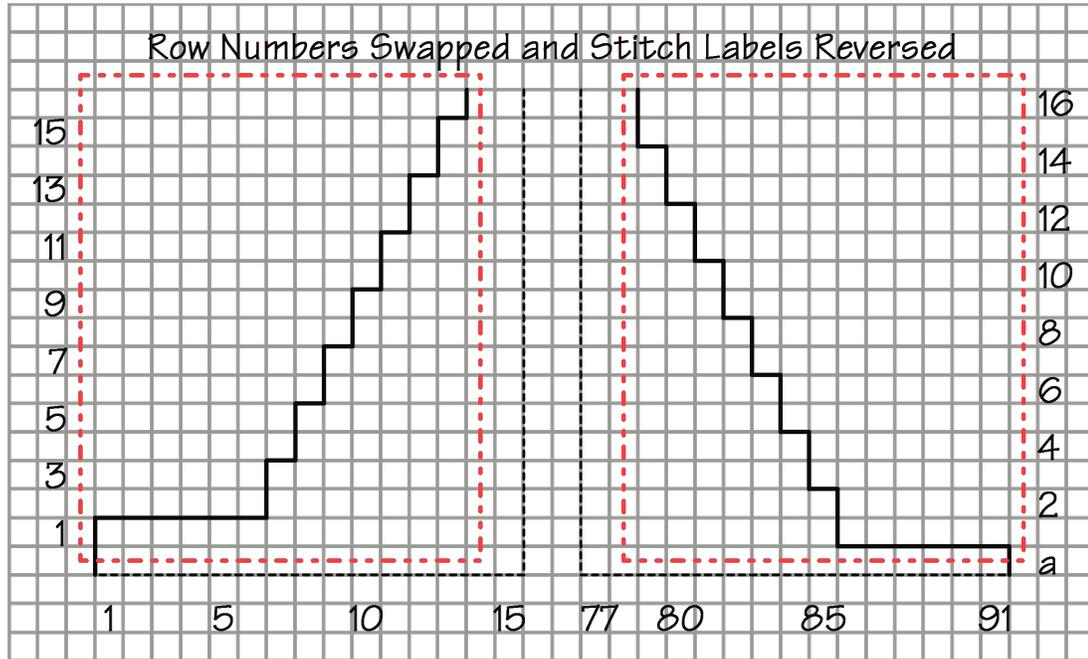
- ☉ The entire boundary line in the **left** portion of the chart is one grid row too **high**, so we need to move it **down** one grid row to the beginning of MIK **public**-side rows.
- ☉ The entire boundary line in the **right** portion of the chart is one grid row too **low**, so we need to move it **up** one grid row to the beginning of MIK **private**-side rows.

How we shift the left-edge boundary line down one row and the right-edge boundary line up one row depends on how we drew the chart initially and what we're willing to do to it. We have at least five options for altering the shaping to what we need.

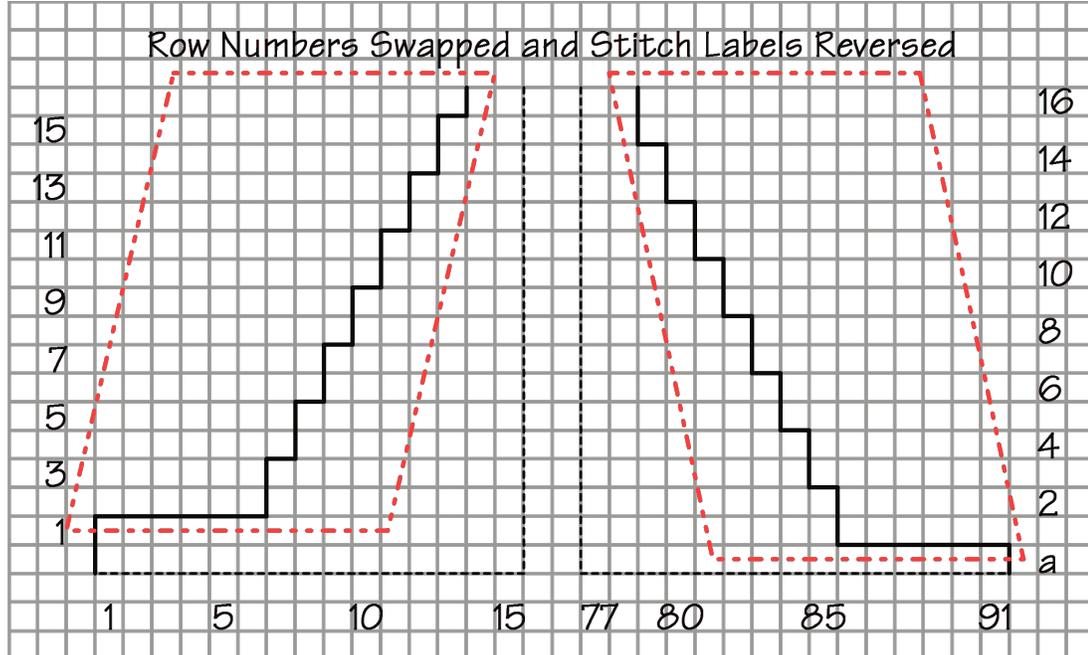
### *Option 1: Cut the Chart*

The first option is to cut both boundary lines out of the sheet of grid paper, leaving the rest of the chart, and especially the row numbers, intact. We slide the left boundary down a row and the right boundary up a row, then tape them in their new positions.

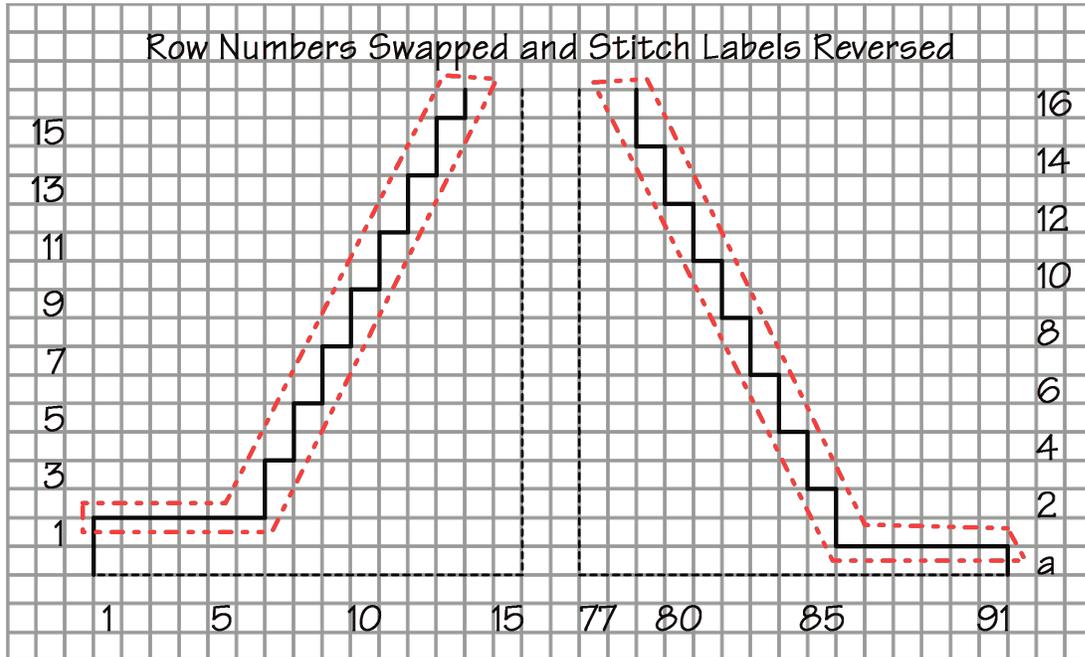
We could cut rectangles



or parallelograms



or even narrow strips



to separate the boundaries from the rest of the sheet.

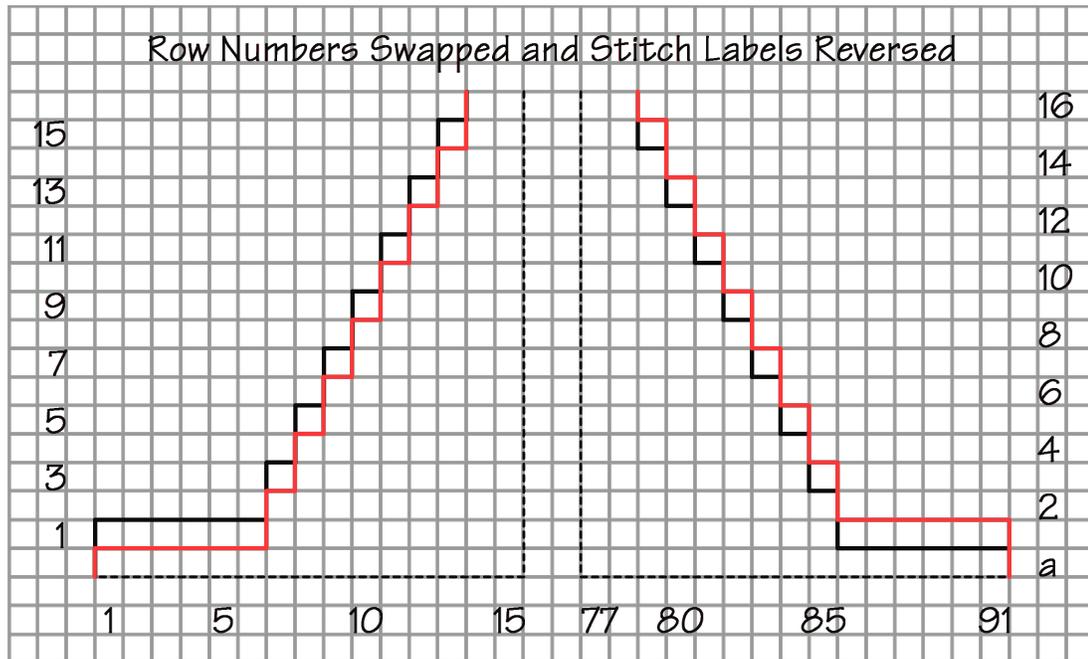
Whichever option we choose, we slide the pieces to the proper positions and tape them back together. Again, if we tape on the back of the sheet, we'll be able to correct marks as needed since they won't be under the tape.

### Lesson Learned

Whenever we tape pieces of a chart together or to another sheet of paper, we should always, if it's at all possible, put the tape on the back side of the pieces. Then we won't have tape on top of the chart's marks, so we'll still be able to alter them if we need to.

### ***Option 2: Redraw the Boundaries***

If we drew the chart with pencil, we could redraw the entire left boundary down one grid row, perhaps in a different color, then erase the parts that represent the boundary for traditional knitters. We'd do the same thing for the right boundary, except that we draw it one row higher.



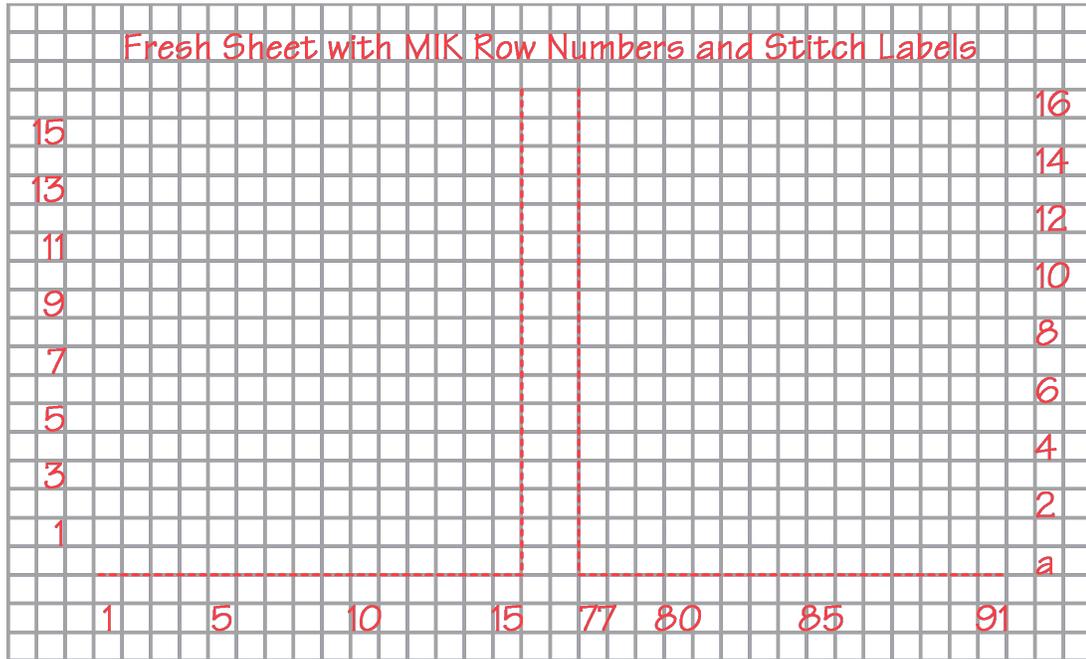
Then we erase the black lines, which are the parts of the traditional knitter boundaries that still show.

### ***Option 3: Trace the Boundaries on a Fresh Sheet***

We could trace the boundaries on a second sheet of grid paper by stacking the fresh sheet on top of the MIK-labeled chart, then holding them on a light box or against a sunny window to help us see through both sheets.

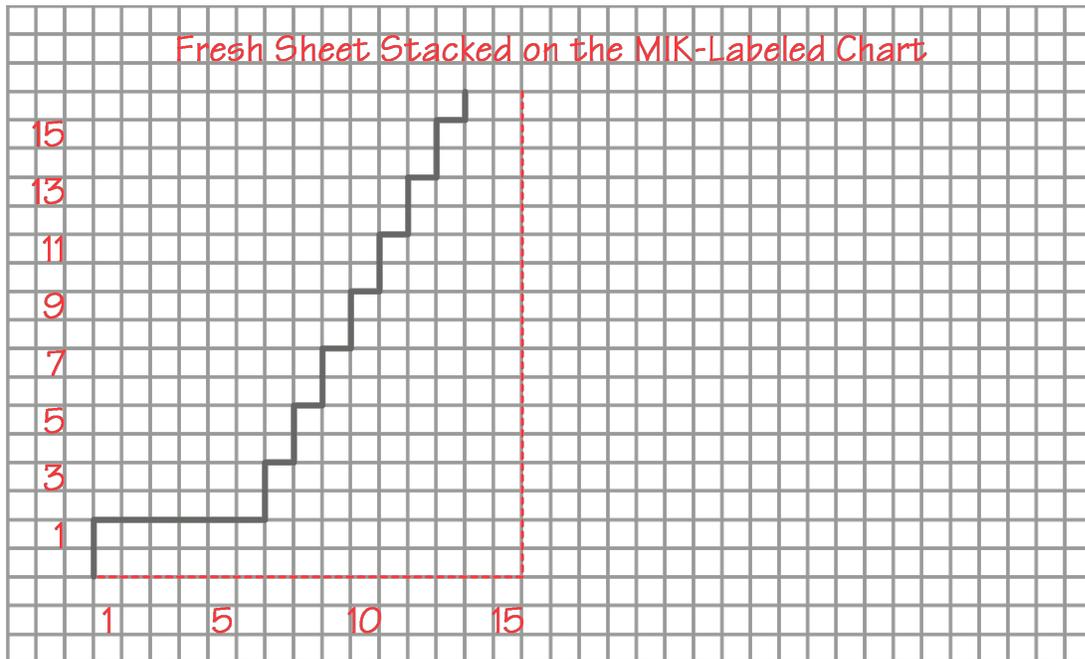
Here's the traditional knitter chart with the row numbers swapped and the stitch labels running from left to right.



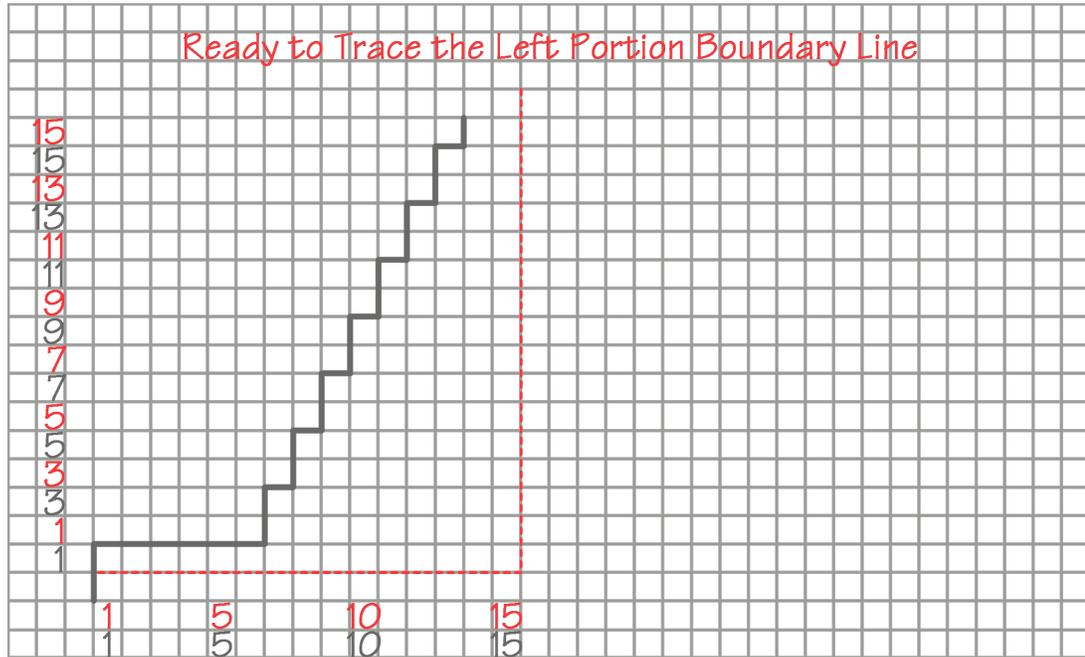


Second, when the fresh sheet is stacked on the MIK-labeled chart, the lines and numbers on the MIK-labeled chart will be gray, since they wouldn't look fully black when we see them through the fresh sheet.

Let's place the fresh sheet on top of the MIK-labeled chart. We'll show just the left portion to minimize confusion.



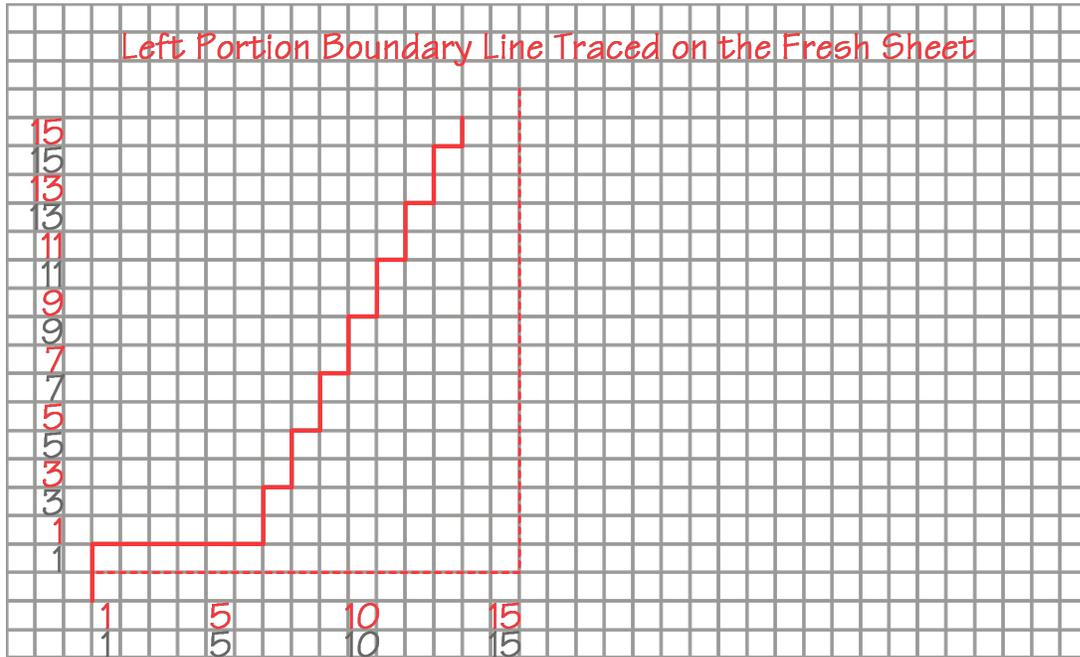
Since we can't see the grayed row numbers or stitch labels, the fresh sheet hasn't yet been moved to the proper place. Because we need to shift the left boundary line down one grid row, we can achieve that re-positioning by leaving the MIK-labeled chart in place (since we may have taped it to the light box or window) and moving the fresh sheet up one grid row.



We’ve effectively moved the MIK-labeled chart **down** one grid row compared to the fresh sheet, regardless of which sheet we physically moved. We know the two sheets are in the correct alignment because of two things.

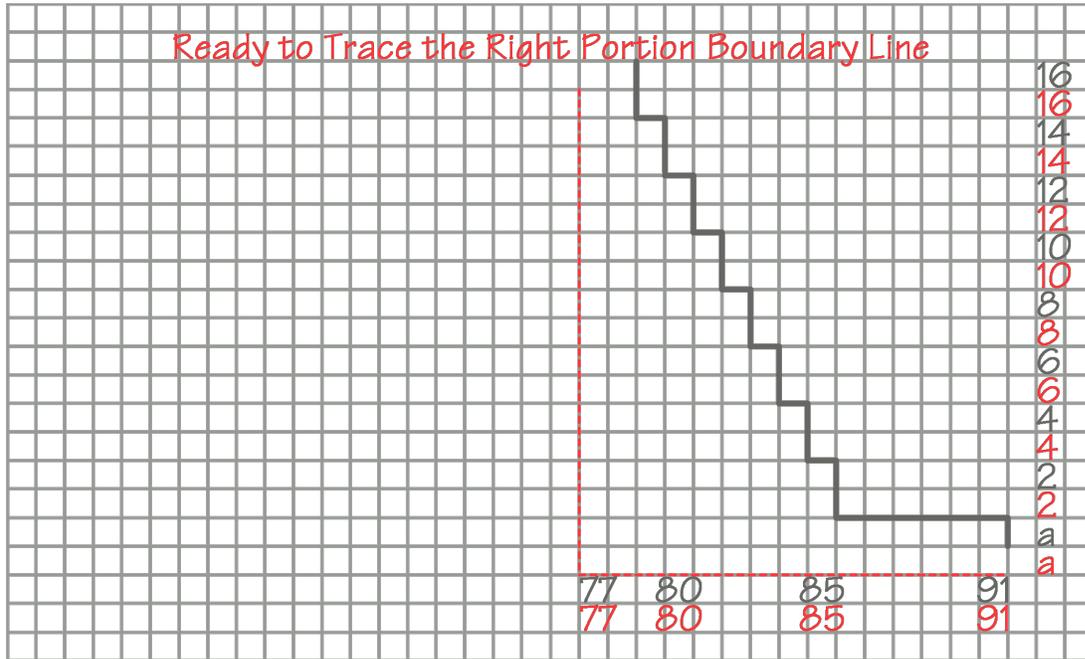
- ☉ The grayed numbers are **below** their red counterparts.
- ☉ The horizontal line representing the six stitches we’re supposed to bind off on the first row of the underarm shaping is now on the bottom edge of the grid row containing the red row number “1.”

We trace the left portion’s boundary line, also shown in red, on the fresh sheet.



Let's adjust the fresh sheet back to the starting position, which means we move it until we can't see the grayed numbers. This time we'll omit the left portion's row numbers, stitch labels, and lines to help us focus.





How can we be sure the two charts are in the proper locations relative to each other? The same two ways we used after we moved the left boundary line.

- ☉ The grayed numbers are all **above** their red counterparts, so we’ve shifted the chart with the MIK labels **up** one grid row, regardless of which physical sheet we happened to move.
- ☉ The red row number “2” is now in the grid row that has the bind-off boundary line segment along its bottom edge.

We trace the right portion’s boundary on the fresh sheet, again shown in red.

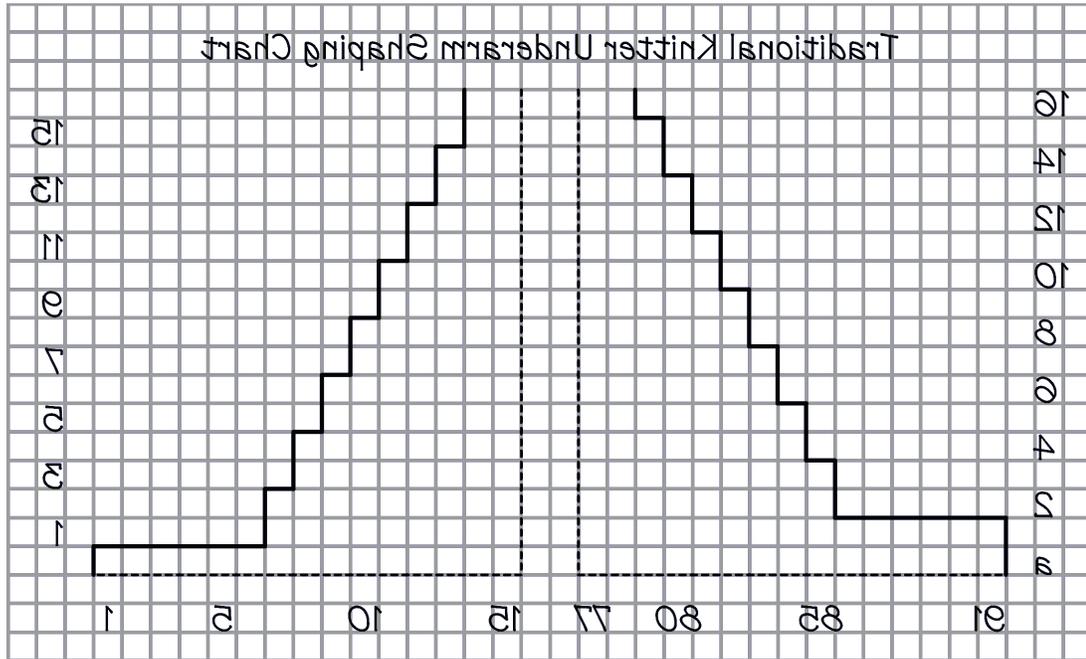


We can tweak the vertical segments at the top and bottom of both boundary lines, so they extend through only the proper rows.



**Option 4: Make a Mirror-Image Photocopy**

Your local copy shop may be able to make mirror-image copies. When we mirror-image photocopy the **unmodified** traditional knitter underarm shaping chart, one issue is that all the text and numbers on the chart will also be mirror-image.



Note that in this option, we must use the traditional knitter chart as we drew it initially. If we change the row numbers and stitch labels to the MIK setup, they'll be in the wrong places on the mirror-image photocopy.

If we need to, we can rewrite all the row numbers beside and the stitch numbers below (or above) the reversed ones.

### ***Option 5: Trace the Shaping on the Back of the Sheet***

This option is similar to the previous one. We flip the unaltered traditional knitter chart over, hold it on a light box or against a sunny window, and trace all the boundaries. Then we write over all the mirrored text and numbers so that they come out the correct way.

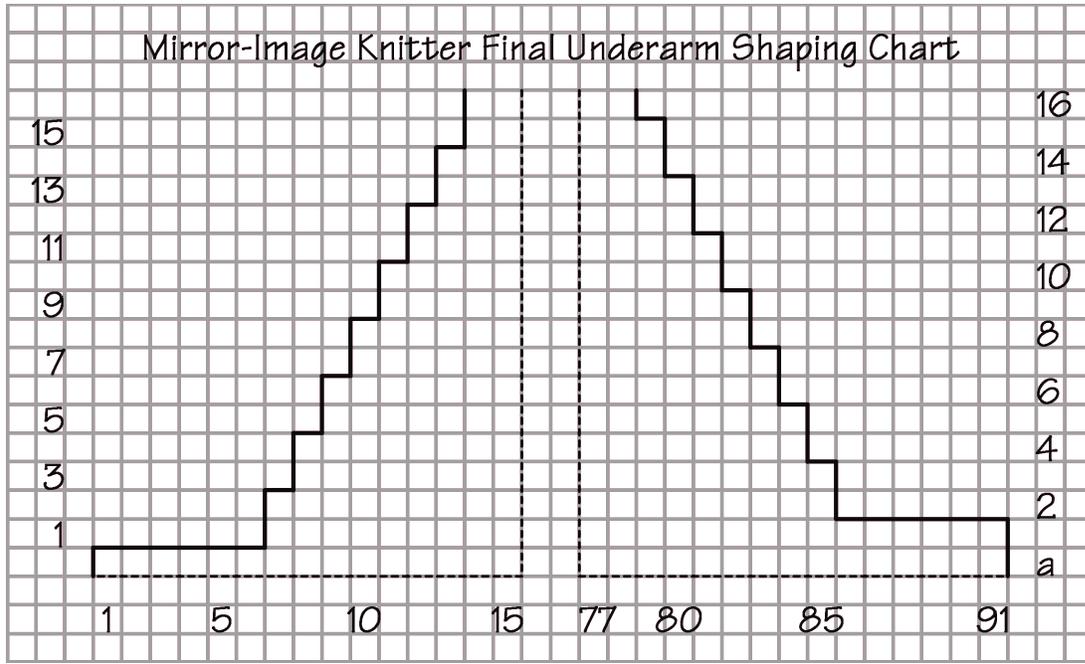
As with option four, we **don't** make the optional labeling changes, because turning the entire sheet over swaps the row numbers and reverses the stitch labels for us.

However, we must have two-sided grid paper, and the grids on the front and back of the sheet must be aligned reasonably closely. This option may therefore not be very useful.

### ***Underarm Shaping Shift Complete***

Regardless of which option we used, the final underarm shaping chart shows how all the shaping has been adjusted by just one row on each edge. It now has the exact layout you

need as an MIK when you pick up needles and yarn, and it applies to both the back and front of the vest.



- ☉ Row A is the final private-side row before you start the underarm shaping.
- ☉ In rows one and two, the horizontal lines below the first six grid cells indicate that you bind off those stitches, just as the written-out instructions in “The Basic Vest” indicate.
- ☉ In the fourteen remaining underarm shaping rows, rows three through sixteen inclusive, you decrease one stitch at the beginning of each row, which again matches the instructions in “The Basic Vest.”

When you complete the sixteen rows of the underarm shaping, you’ll have removed a total of thirteen stitches on each side, exactly as directed by the written-out instructions.

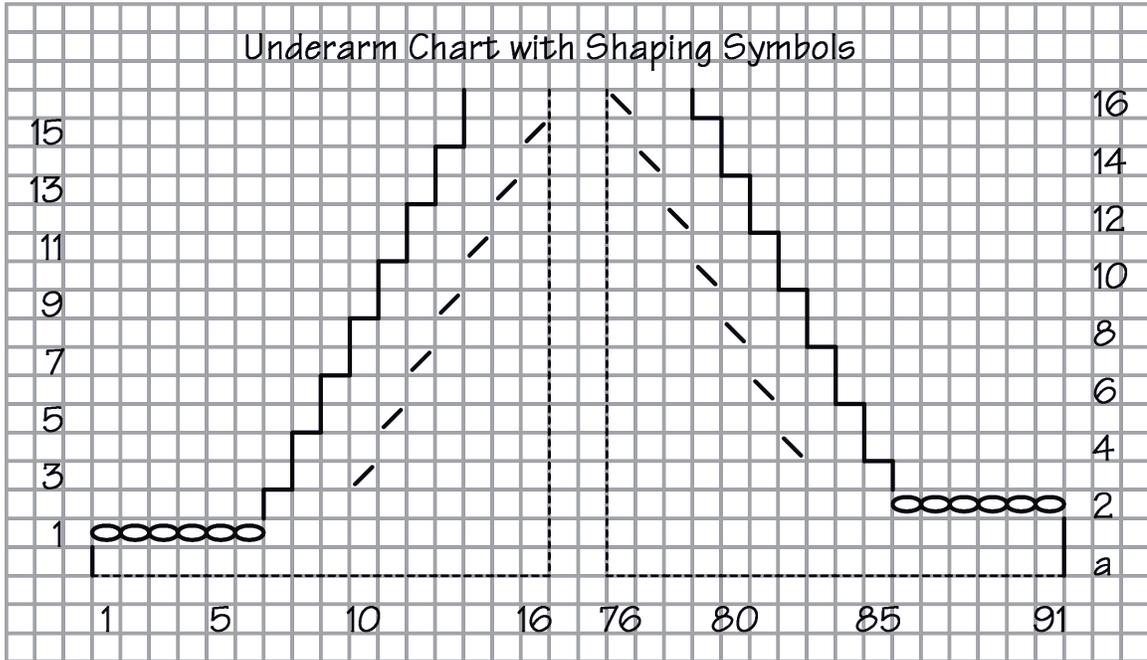
### ***Adding Explicit Shaping Symbols***

Some of us—*cough*—might need, or even just want, explicit bind-off and/or decrease symbols in addition to the boundary lines, especially if we constructed the original traditional knitter chart according to the suggestion at the end of the main chapter to show shaping only with boundary lines.

If so, we have **now** reached the point where we simply add our preferred bind-off sym-

bols at the beginning of those rows. We likewise can **now** easily add the appropriate symbols to show the exact decreases we want to do in the exact locations we want to do them.

If, for example, we prefer to work decreases two stitches from the edge, we add the decrease mark in the third grid cell on the decrease rows.



Note that we had to add one more stitch at the inner ends of the chart rows so we could put the decrease symbols in the proper places in the last two underarm shaping rows.

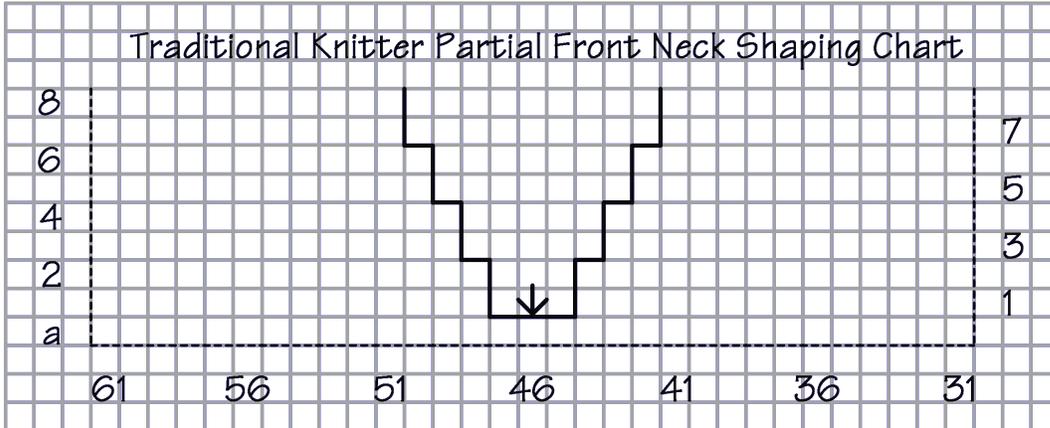
In this example, the decreases will be quite noticeable because they're running parallel to the fabric edge. See part one's "Decreases" for details on making them prominent or minimizing them.

### Lesson Learned for Mirror-Image Knitters

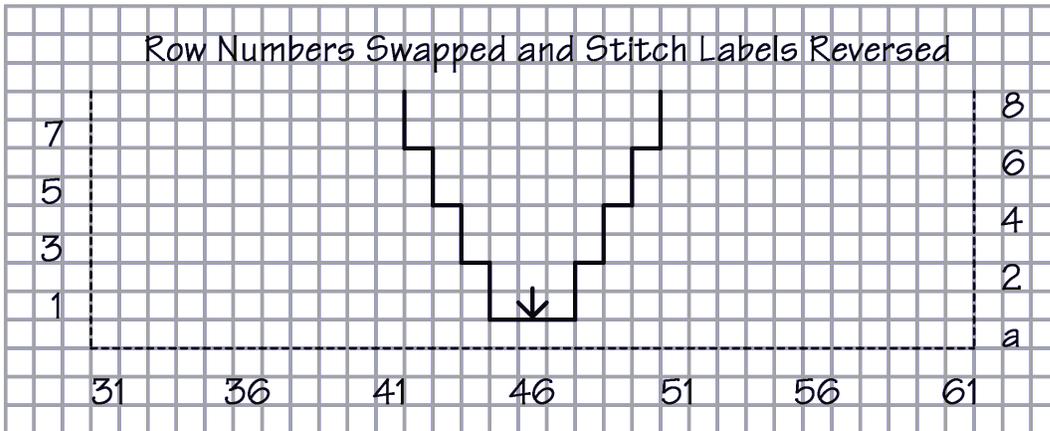
If we want to show explicit bind-off and decrease symbols in a chart, it's better to construct the traditional knitter chart **without** those special symbols, then make all the MIK shaping changes in the usual way. At that point, we can finally add our preferred bind-off symbols at the beginning of the necessary rows, and we can add the marks for the exact type of decreases we want to use in the exact places we want to work them.

### Front Neck Shaping

We'll look at a partial chart for traditional knitters, showing just the first eight rows of the front neck to keep the charts reasonably short.



Here's the chart with all the MIK labeling changes, swapping the row numbers and reversing the direction the stitch labels run.

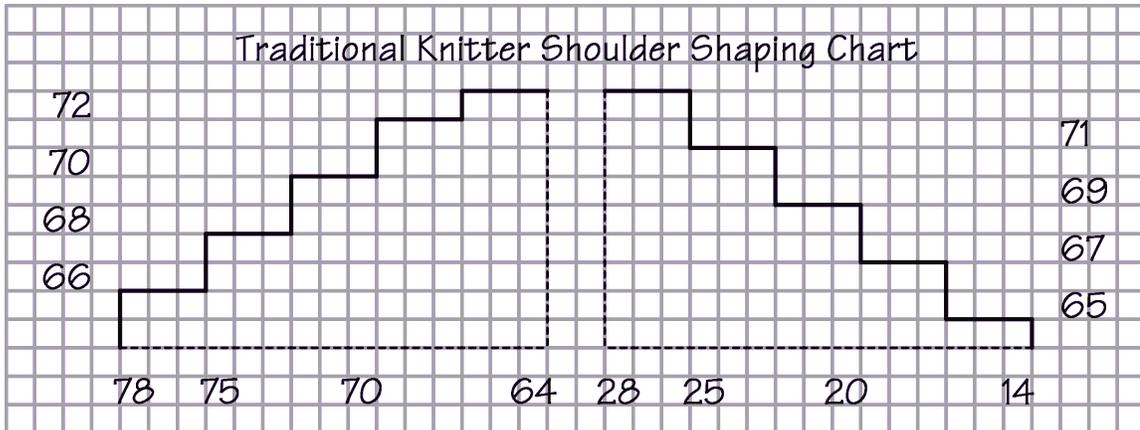


Do we need to shift the shaping?

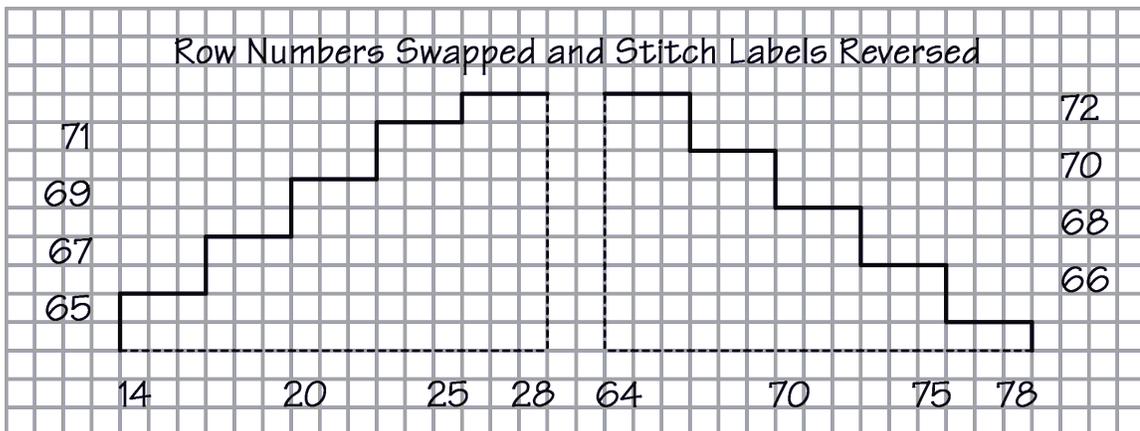
In this particular project, there are no adjustments needed for the V-neck itself, since both traditional and mirror-image knitters decrease one stitch at the neck edges on public-side rows. Since the neckline ends of the public-side rows are in the exact same places in both the traditional and the mirror-image knitter charts, their shaping doesn't shift.

## Shoulder Shaping

The shoulders, however, do need to be adjusted. Let's start with the traditional knitter shoulder shaping chart, including the project row numbers we determined based on the example underarm depth and row gauge used in the main chapter. We'll work with the version that uses horizontal lines below instead of marks within the grid cells to indicate the stitches we bind off.

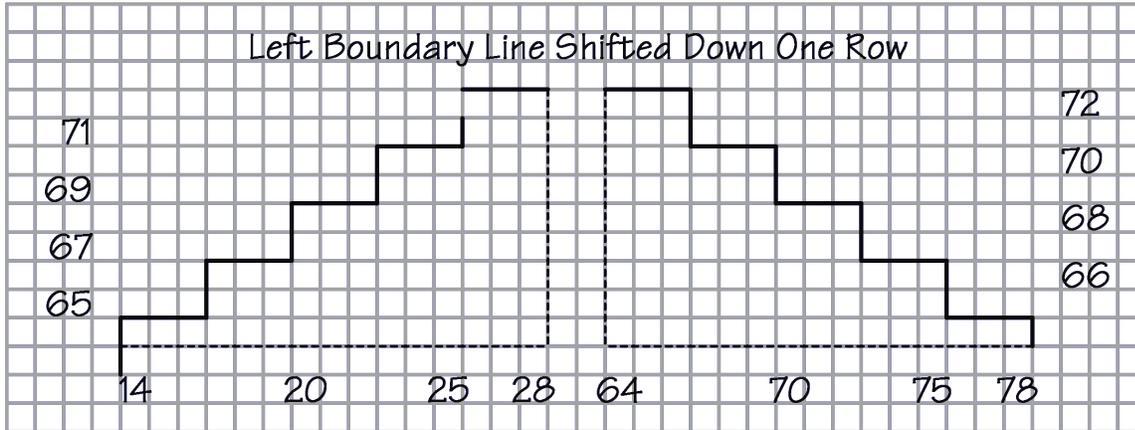


Our first step is to swap the row numbers and run the stitch labels in the other direction. Again, this pair of changes is optional, but there are benefits in making them.

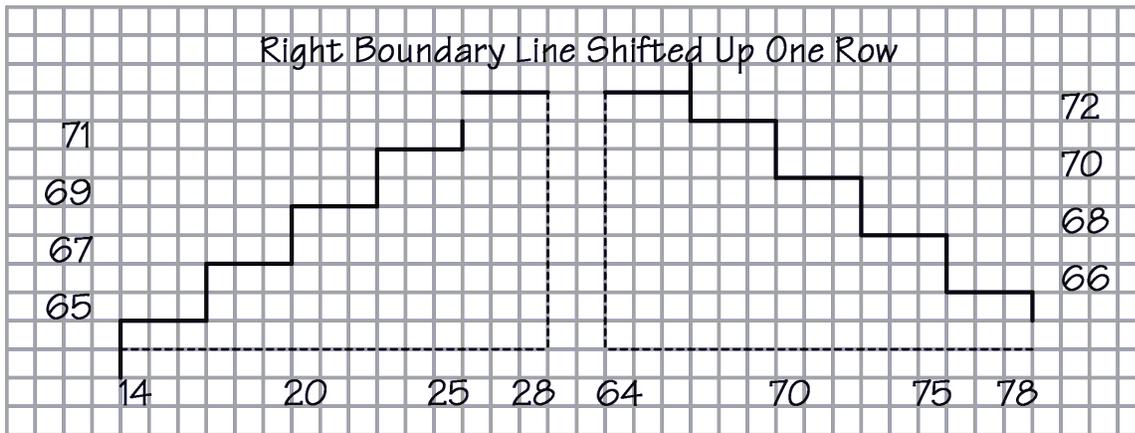


As before, row sixty-five is still row sixty-five, so the row numbers stay in the same grid row. They simply move to the other edge of the chart.

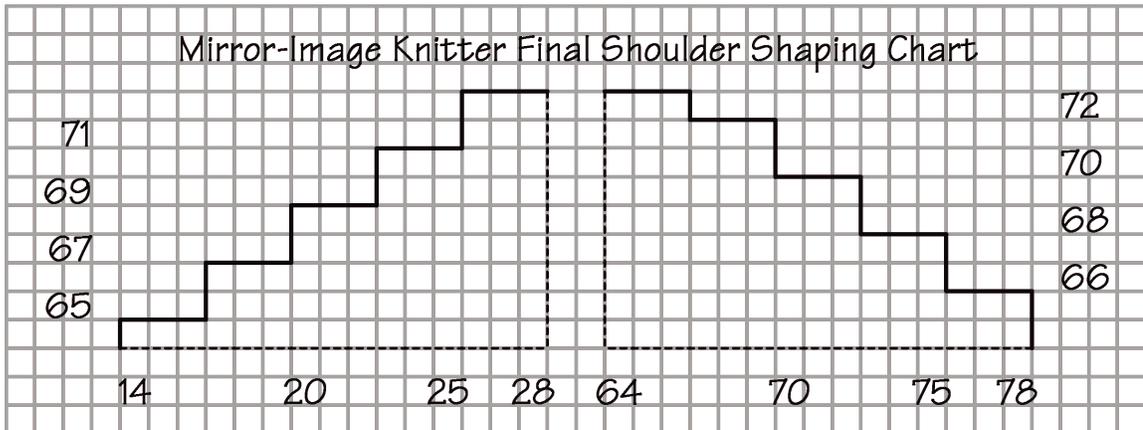
We do the same thing we did at the underarms: move the left portion's boundary line down one grid row



and the right portion's up one grid row.



Let's clean up the vertical segments at both ends of the boundary lines.

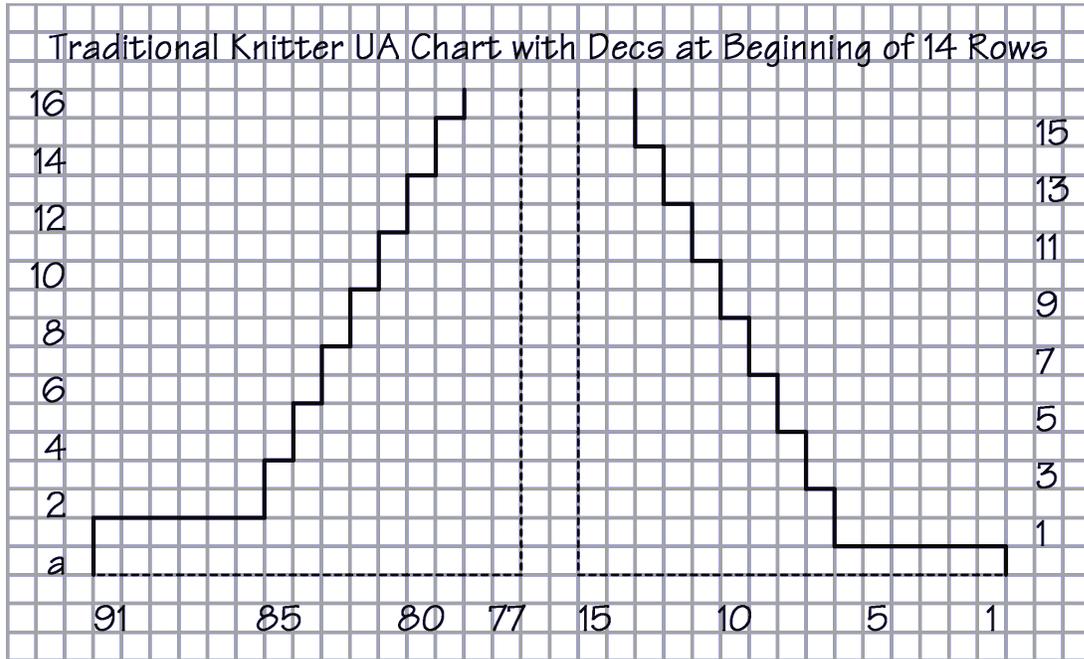


We would get this same end result no matter how we moved the shoulder shaping boundaries, whether cutting, redrawing, tracing on a fresh sheet, mirror-image photocopying, or tracing on the back of the sheet.

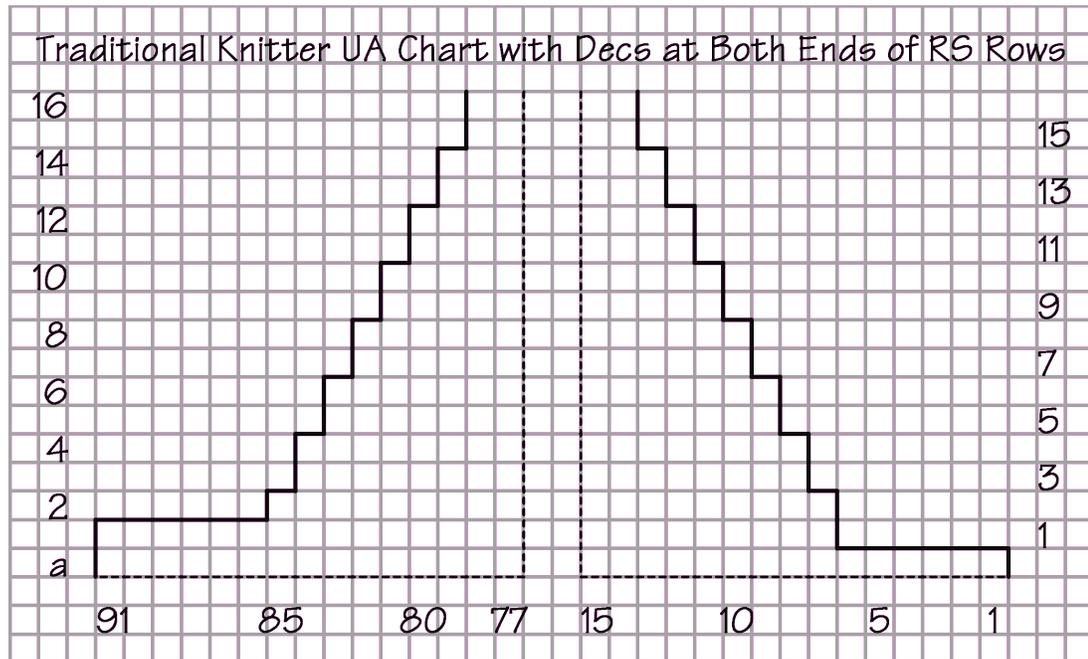
## Sometimes Shapings Don't Have to Move

For the underarm curve shaping, “The Basic Vest” told us to decrease at the beginning of fourteen consecutive rows, which of course alternate between the public and private sides. Since the beginning of those fourteen traditional knitter rows all became the end of our mirror-image knitter rows when we swapped the row numbers and reversed the stitch labels, the decreases had to be moved down or up to occur in the correct places.

But what if “The Basic Vest” instructions had said “Decrease one stitch at each end of the next seven public-side rows”? Let’s look at that shaping variation in detail, starting with the traditional knitter chart with the as-written shaping.



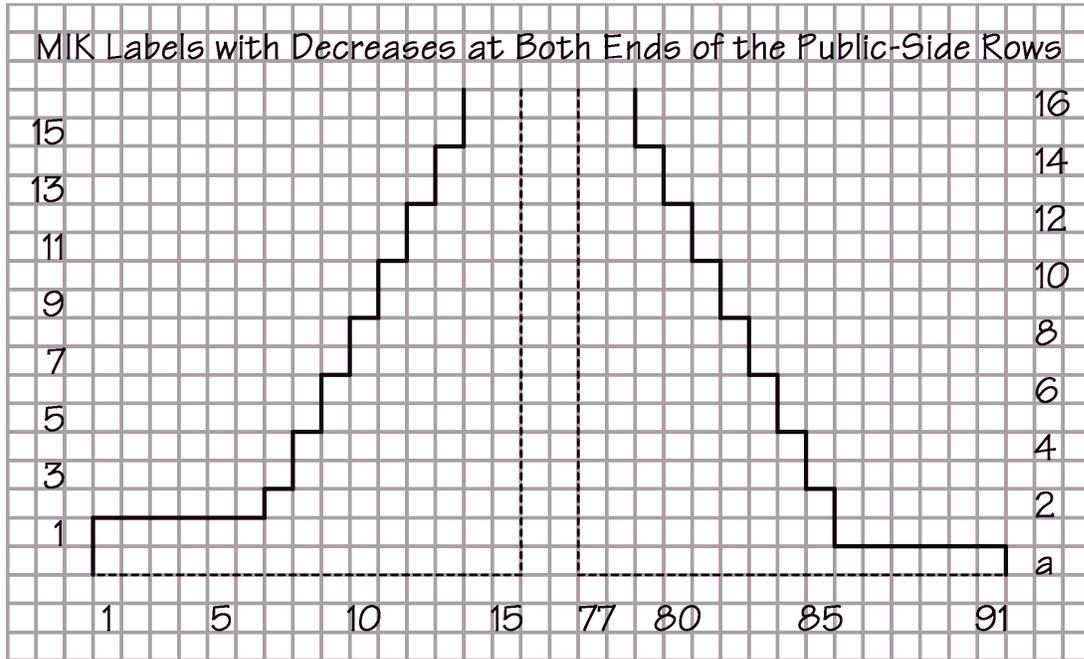
We first alter this chart to show the new version of the instructions. The decreases in the left portion must all be done at the end of the public-side rows instead of at the beginning of the private-side rows. We shift the left portion's boundary line with the method we prefer.



When we compare the two charts, they don't substantially change. In seven places, one stitch moved one row at the edge of the fabric. Unless we're working with very thick yarn, these shaping changes almost certainly won't be noticeable in the final garment.

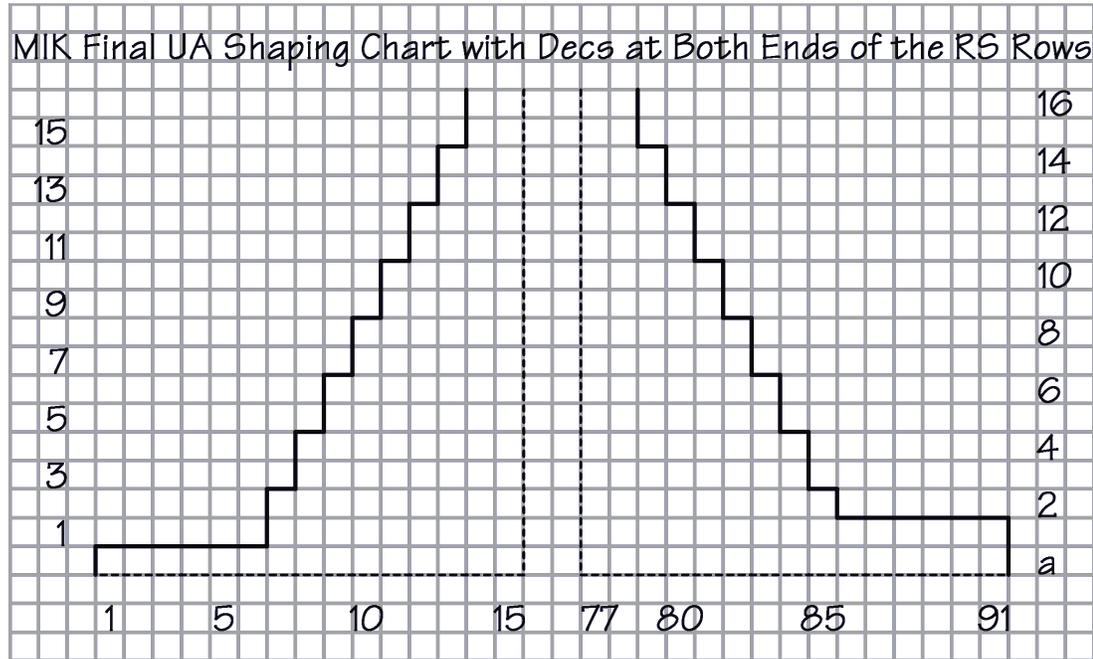
Note that the height of the vertical segment at the beginning of row two had to shrink from being two rows tall to being only one row tall, since we'll decrease at the end of row three instead of working all the way back to the beginning of row two.

We now adjust the row numbers and stitch labels to transform that version of the chart to the way we work.



Note that changing the instructions for the curve decreases did **not** affect the bind-offs at the beginning of the first two underarm rows.

If we're unwilling to break the yarn to do the bind-offs that are still positioned at the end of those rows, we'll need to move the wide horizontal boundary line segments to the beginning of those rows. As before, we move the left portion's down one grid row and the right portion's up one grid row, which gives this final chart.



Since the locations of the beginning and end of rows three through sixteen didn't move, then the only chart changes we must make are moving the bind-offs to the beginning of rows one and two.

When we compare this chart to the one that shows all the as-written instructions moved to their MIK locations, we again see that there are no real differences to speak of.

## Change Shaping to Eliminate Some MIK Tweaks

If we so choose, we could do some minor alterations to the written-out instructions to minimize the number of MIK chart changes. As noted before, there would be few situations where adding or losing a stitch, or binding off several stitches, one row earlier or later would cause problems.

There are at least two things we might be able to do.

### *Do Decreases at Both Ends of Every Other Row*

We can probably alter decreases at the beginning of several consecutive rows to decreasing at both ends of every other row, exactly as we did just now with the underarm shaping. And in many projects, it really wouldn't matter whether we did the paired decreases on the public- or private-side rows.

One reason to make this change is so that we don't have to do anything on the private side except work back evenly, giving us an "Ahhh" moment every other row, at least as far as the shaping is concerned.

### *Leave the Shaping Where It Is*

We could also just leave the underarm curve decreases where they are in the traditional knitter chart. For this and many other projects, there's no cast-iron imperative to decrease at the **beginning** of those fourteen rows, as the instructions say. We could just as easily work those decreases at the **end** of our fourteen MIK rows without any negative consequences.

If there are bind-offs in the shaping, we have to weigh our willingness to break the yarn to secure the final stitch if we leave the bind-offs at the end of our rows. If we don't want to break the yarn, we move only the bind-offs down or up in the usual way.

### *If We're Unsure*

Sometimes our knitting imagination won't be able to tell us whether or not we'd have an issue in a particular project if we left the shaping where it is for traditional knitters. In those projects, we chart the instructions as a traditional knitter would, then make our full set of changes as already described.

## When There's a Stitch Pattern

When we altered "The Basic Vest" traditional knitter chart to the MIK version, it was easy to move the left portion's boundary line down one grid row and the right portion's boundary line up one grid row without any real trouble, because the vest is one-color stockinette.

But what if a project uses some kind of stitch pattern, whether texture or color?

In those cases, we have to make sure that when we shift the shaping, we either don't disrupt the stitch pattern or that we restore it correctly.

We have all the same options as before:

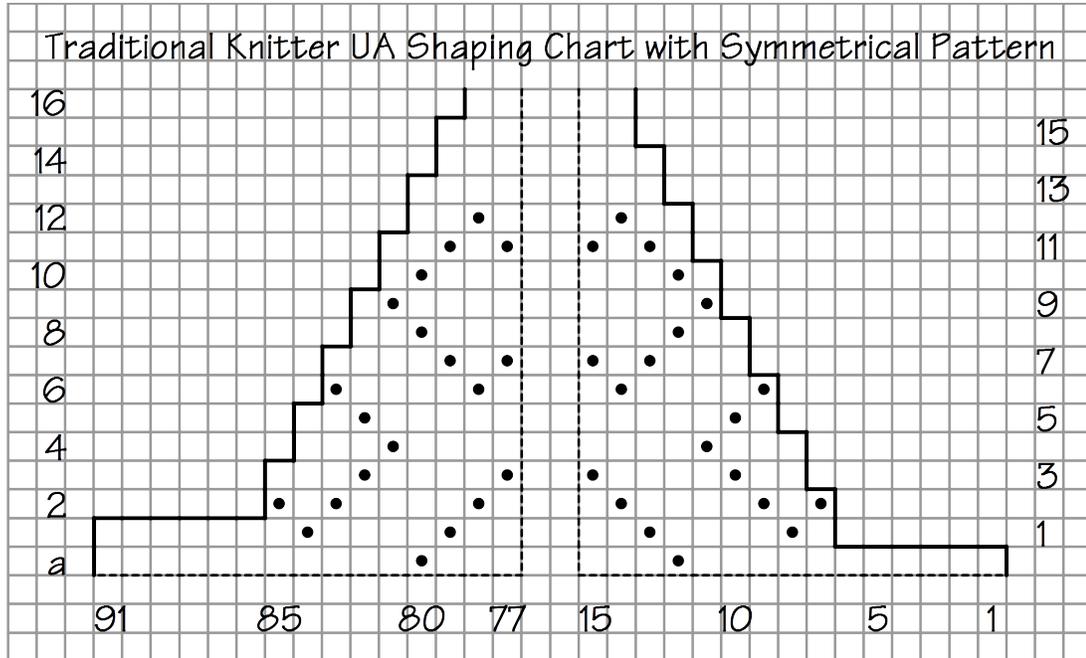
1. cut the chart into several pieces, move them, and tape them back together
2. redraw the boundaries
3. trace the boundaries on a fresh sheet
4. make a mirror-image photocopy
5. trace the shaping on the back of the sheet

However, four out of these five options will be problematic, two of them especially so,

when the pattern is not symmetrical around a vertical line straight down the center of the project.

### *If the Pattern Is Symmetrical Down the Center*

This kind of stitch pattern is the least troublesome. We start with a traditional knitter chart and add some purl diamonds in mirror-image locations.



To adjust this traditional knitter chart to what you need as an MIK, you have all the same options we looked at before. We won't go through complete details for all of them, since you'd do the exact same things we've already learned. We will, however, look at some of the complications that might arise.

#### **Option 1: Cut the Chart**

If we cut the entire shaping areas, slide the left portion down and the right portion up, then tape them in those new places, it is true that the shaping will all be shifted to the beginning of our rows.

The problem is that the stitch pattern will be moved also. If we cut narrow strips around the boundary lines, leaving in place as much of the rest of the grid as possible, we minimize how much of the stitch pattern moves, but we'll probably still have to do some clean-up along all the cut edges, on the pieces we move and the parts that don't.

If we tape everything together on the back side, we can make those alterations easily, since none of the marks will be under any tape.

### Option 2: Redraw the Boundaries

Let's skip over option two for a moment.

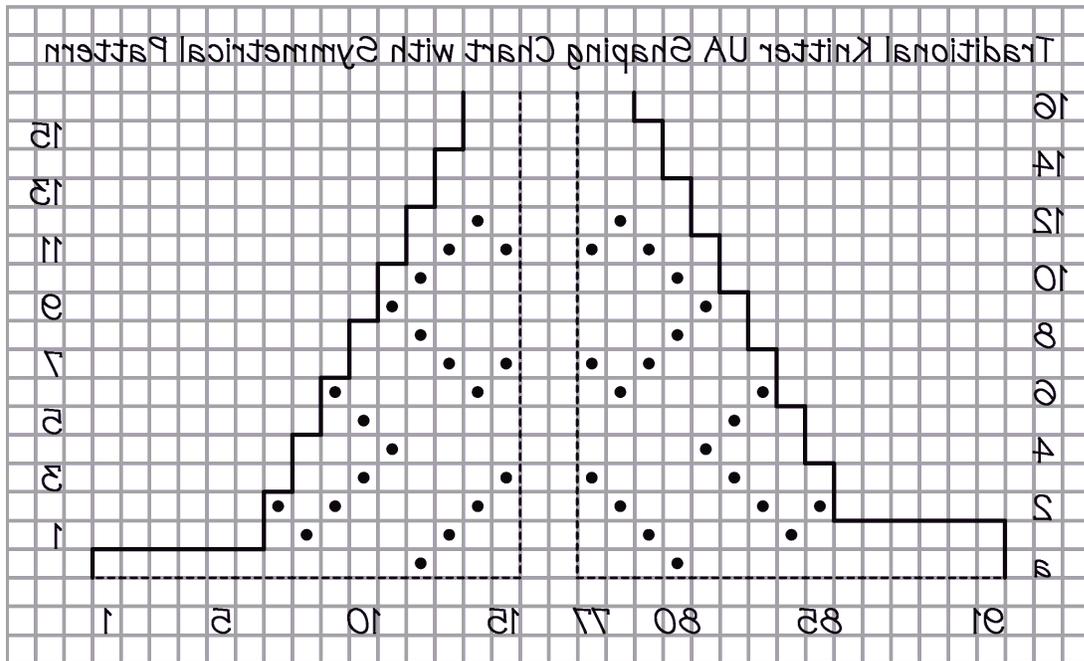
### Option 3: Trace the Boundaries on a Fresh Sheet

Tracing the boundaries on a fresh sheet of paper entails tracing all the stitch pattern symbols as well. If the stitch pattern is lightly sprinkled across the chart, it's not very time-consuming to trace it too. But if the stitch pattern is complicated or if we're making a 3XL, tracing the entire pattern may be more work than we want to do.

In those cases, we might simply leave what are now the end-of-row decreases alone and move only the bind-offs to the beginning of their proper rows.

### Option 4: Make a Mirror-Image Photocopy

As we saw before, if we know we'll make a mirror-image photocopy, we simply draw the traditional knitter chart, then leave it as is. We would **not** swap the row numbers and reverse the stitch labels, because the photocopying itself will reverse them for us.



As before, we can write next to the mirrored row numbers and above or below the stitch labels if we have difficulty reading them.

### Option 5: Trace on the Back of the Sheet

After we traced all the shaping boundaries, we'd have to trace the entire stitch pattern as well, but, as with option three, that might be more work than we want to do. As before, we also need grid paper with closely aligned grids on both sides of the sheet.

### *If the Stitch Pattern Is Asymmetrical*

Let's consider the issues if our stitch pattern is not mirror-image on both sides of a vertical line down the middle of the project.

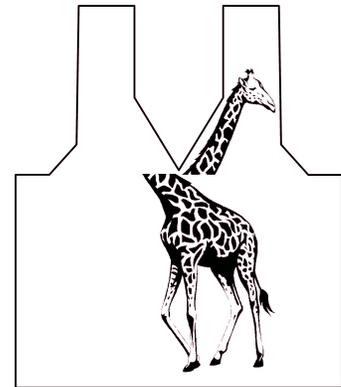
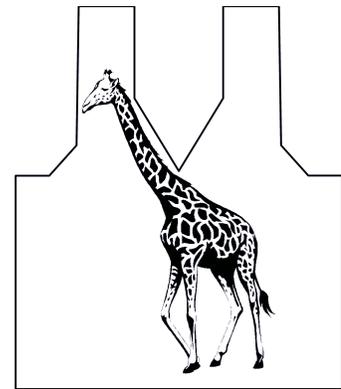
Here's a cute addition to the vest chart, including all the fabric before the underarm shaping starts.

If we use option one and cut really narrow strips, we minimize the corrections we'll need to make to the stitch pattern.

Option three entails redrawing all the pattern symbols on the fresh sheet, which in some situations may again be more work than we want to do.

Options four and five are not going to work with this kind of stitch pattern at all. If we charted only the shaping, from the underarms to the top of the shoulders, then whether we make a mirror-image photocopy or trace that chart on the back of its sheet, we get a completely undesirable result.

With these types of stitch patterns, we would have to reverse the **entire project chart**, not just the parts with the shaping. Yes, technically speaking, no portion of the giraffe would be affected when we move the underarm shaping. The main point here is what can happen if we mirror-image only **part** of a chart with an asymmetrical stitch pattern.



## The Best Option Is Option 2: Redraw the Boundaries

Redrawing the boundary lines a grid row lower on the left and higher on the right is almost always going to be the easiest option for any kind of stitch pattern, but especially for asymmetrical ones.

When we draw the traditional knitter chart as our first step, we can save a lot of future

work by using a different technique for the boundary lines. The easiest thing to do is to draw them so that they're barely visible up close, which means we can do something like

- ☉ use a light-colored pencil barely different from the sheet's grid lines
- ☉ use our regular pencil with the lightest pressure possible

Once we've completed the traditional knitter chart, we use our regular pencil at our regular pressure to draw the boundaries one grid row down on the left and one grid row up on the right. If we draw the original boundary lines so that they're barely visible, then when the chart is farther away from us as we work from it, we may not be able to see at all those segments not covered by the shifted boundary lines. If we can see them, we just erase them.

We also have the option to draw over the shifted boundary lines with a pen (after we've triple- or quadruple-checked them to make sure they're correct). Then we can easily erase the penciled segments that still show.

### Lessons Learned for Mirror-Image Knitters

When we're drawing the initial traditional knitter chart, we should use either a light-colored pencil or light pressure with our usual pencil to draw the shaping boundaries. We draw the stitch pattern, if any, with our usual pencil at our usual pressure. When we move the shapings, we can draw them with our usual pencil at our usual pressure, and we may not even have to erase any parts of the initial boundaries that remain uncovered. We could also draw the shifted boundaries with pen, then erase any segments still visible.

Explicit bind-off and decrease shaping symbols can be considered a type of "stitch pattern," so we will have less work to do if we draw the initial traditional knitter chart using **only** bending boundary lines to indicate the shaping. **After** we've made the MIK changes, we can add the explicit shaping symbols in the proper places. (Non-shaping bind-off and decrease symbols, such as we might find in the center of a lace pattern, need to be drawn as usual along with the rest of the stitch pattern.)

### So Before We Start...

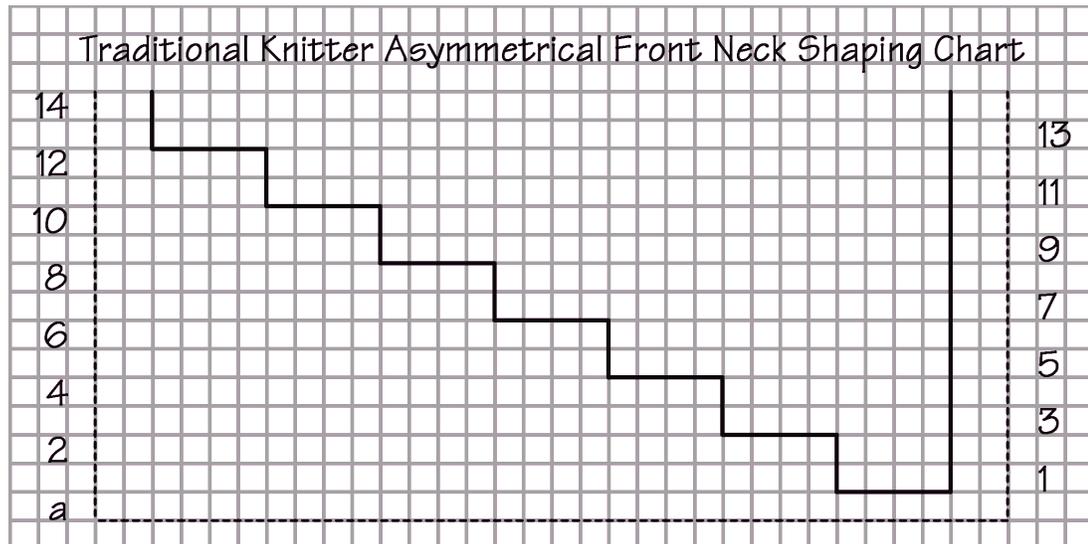
When there's a stitch pattern in the fabric, instead of the project having plain, one-color stockinette, we should see if we really need to change the chart at all.

We can almost certainly leave decreases done at the beginning of traditional knitter rows at the end of what are now the end of our MIK rows. That means we only have to move to the beginning of our rows the horizontal lines or marks indicating bound-off stitches, unless we're willing to break the yarn to secure the final stitch at the end of those rows.

Of the options mentioned here, it's probably always quicker to use the option of redrawing just the boundaries, especially if we drew the initial lines with either a lighter color or a lighter pressure.

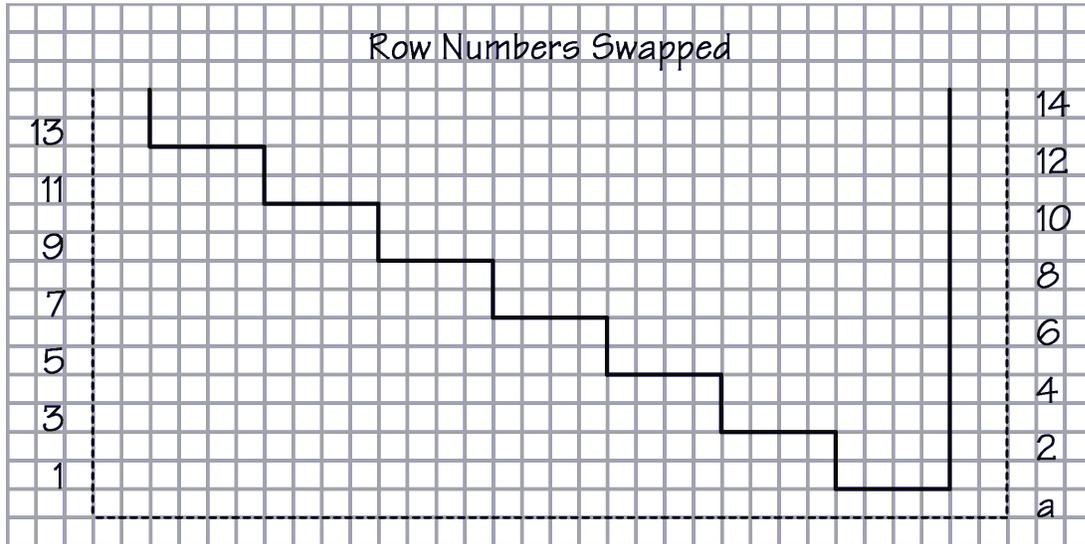
## Asymmetric Shaping

What happens when the shaping itself is not mirror-image? Here's an asymmetrical design where the left front neck goes from the bottom of the neck opening straight to the top of the shoulder. The right edge of the front neck grows narrower and narrower on a diagonal up toward the right shoulder.<sup>1</sup>

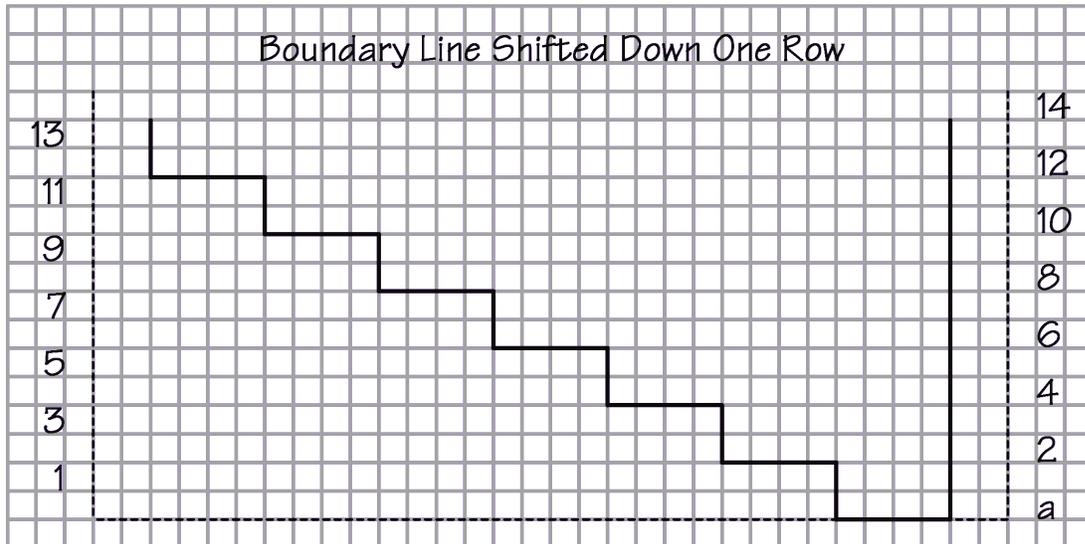


Let's make the MIK changes to the row numbers.

<sup>1</sup> We're not designing a new garment, so the chart is only large enough for demonstration purposes.



As with the shoulder shaping chart, all the bind-offs are now at the end of our public-side rows, so we'll do our standard modification of moving the entire boundary line down one grid row.



Let's see what's changed.

- ☉ We still bind off four stitches along the right neckline's diagonal edge every other row, but now we work those bind-offs at the beginning of our private-side rows instead of at the end of our public-side rows.

☉ We start the shaping one row early, on “foundation row A.”

Neither of those changes is really an issue.

We could have moved the entire boundary line up one grid row, which would also have moved the bind-offs to the beginning of the private-side rows. But doing so makes the neck shaping start one row **late**. In worsted or fingering weight, one row earlier or later is not likely to be a problem. In chunky yarn at two rows per inch, the higher neckline we get if we delay the first bind-offs until row two may rub the wearer’s throat and make the garment very uncomfortable.