

Chapter 170

INCREASES

What kinds of project charts need to show increases? You'll need increases to work

- ☉ sleeves from cuff to underarm
- ☉ toe-up socks
- ☉ items started in the center and worked outward, such as hats started at the crown of the head or circular/square/hexagonal shawls
- ☉ square items worked from corner to corner
- ☉ triangular shawls worked from the point to the long edge

Charts can be used for all of these situations.

Types of Increases

There are many ways to do an increase, and we all did lots of the easiest one (although strictly inadvertently) when we were first learning how to make ribbing: a yarnover. If we forget to move the yarn to the front for a purl stitch or to the back for a knit stitch, we will find a yarnover at that spot on the next row.

The next easiest is Elizabeth Zimmermann's backward loop.

Cat Bordhi has given the names *LRinc* and *LLinc* to what other books usually call *lifted increases*: stitches made in the top right or top left of the stitch on the previous row, which results in a new stitch that makes the grain of the fabric lean one way or the other.

We can also knit into the front and back of a stitch (KFB), which leaves a purl bump at that spot. If we cast on fewer stitches for a sweater's bottom ribbing, we can do KFB in lots of evenly-spaced places on the last (or only) ribbing knit stitch before a ribbing purl stitch to get the stitch count up to what's needed for the body, which will hide the increases nicely.








The running thread before the stitch on the left needle can also be used as the foundation for a new stitch. This technique is sometimes called a *raised* or *bar increase*. Pick it up with the tip of the left needle

- ☉ from the back if the increased stitch needs to be a knit, or
- ☉ from the front if the increased stitch needs to be a purl.

The point of picking up the running thread from the back or the front is to help us avoid a small hole at the increase point. If we work the picked-up thread so that it's twisted, there won't be (much of) a hole there. If we work the loop so that it's not twisted, it will leave a hole, though it will be a smaller hole than if we had done a regular yarnover.

Increase Symbols

Here are symbols for various increases, along with the keys we use to enter them into our charts:

y		Yarnover
+		Make one (by any method)
?		Knit into the front and back of the stitch
x		Cat Bordhi's LLine
X		Cat Bordhi's LRinc
:		Pick up running thread from front
;		Pick up running thread from back

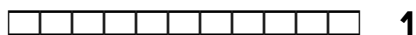
Increase Sampler: Toe-Up Sock

Toe-up socks start right at the tips of the toes with about half the total stitches that will be needed to get around the foot. That means we'll have to do increases to get up to the full number of foot stitches.

Let's say the foot of our sock will be forty-two stitches around, so we'll have twenty-one stitches on the sole side and twenty-one on the instep side. We are instructed to start, however, with eleven stitches on both the sole and the instep, then increase two stitches on both the sole and instep every other round. For each increase round, on both the sole and the instep, we work one stitch, do an increase, work across to the last stitch, do another increase, then work the final stitch.

We will have five increase rounds with plain rounds in between them.

As with the mitten-fingertip shaping, we'll again just show what happens on either part of the sock, since you would do the same thing each round on both the instep and the sole. Here are the eleven stitches we start with for, say, the instep.



The First Increase Row

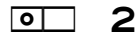
So here's the first stitch, along with the row number.



Hey! Wait a minute! Why is the row number on the *right* edge of the row?

Remember, we're making a sock. A sock is the last place we want a seam, so we're working in the round. That means every row (technically, every round) is a public-side row (round!), so every row (*round!!*) in this chart will have the row (*ROUND!!!*) number on the right.

Let's do all the increases as yarnovers. Here's the first one.



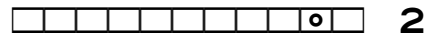
Now, how many stitches do we work before the next yarnover?

We started with eleven, and we work one stitch before the first yarnover and another stitch after the second yarnover. That leaves nine stitches between the yarnovers.

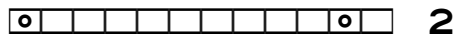
Don't get confused about how many stitches there are *between* the yarnovers. Don't think that there are only seven stitches between the yarnovers, because that would mean we were counting the yarnovers themselves as part of the original eleven stitches.

We started with eleven stitches, so when we finish row (er, round) two on this half of the sock, we will have thirteen total stitches.

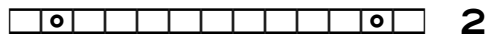
So let's add nine knit stitches,



the yarnover,

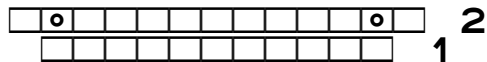


and the final knit.



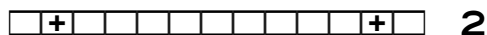
The First Two Rows (Rounds!)

Let's put the first two rounds together.

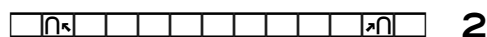


If we want to do a different increase, or if we don't care exactly which increase is used, we can use different increase symbols.

Here's a good choice for "whatever increase the knitter wants to use" (my favorite kind). It's located, logically, under the Plus key.

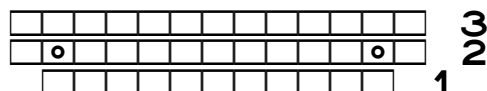


If we're making toe-up socks with one of Cat Bordhi's patterns, then we'll want to use symbols that remind us to use her LLinc and LRinc increases, which are available under the lowercase x and uppercase X.



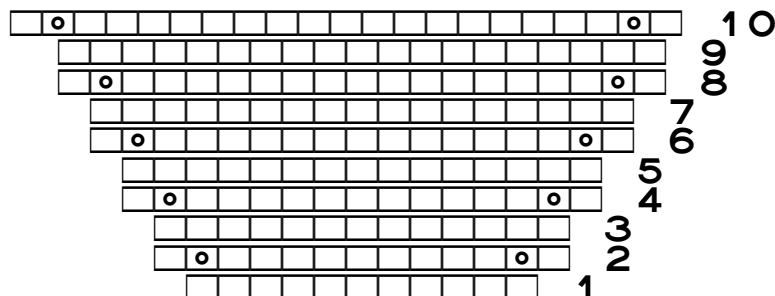
The Plain Round

Since we do the increases every other round, we'll simply work even on round three.



The Rest of the Increases

We need to do four more increase rounds, up to a total of twenty-one stitches (remember that we have twenty-one on the sole *and* another twenty-one on the instep, even though our chart shows only one or the other).



What's wrong with the last round, round ten?

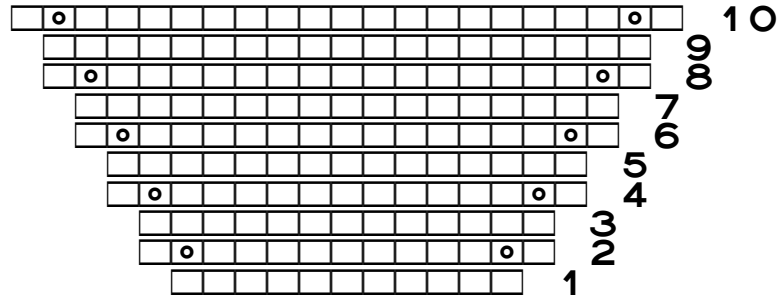
Should We Use Ordinary Lines or Tables?

In this short example, the chart rows have been on ordinary lines instead of my preferred multi-row tables.

Remember from chapter 2 that if we don't use the word processor's tables, it's up to us to use spaces to keep the stitches lined up properly. That's what's happened here.

Aligning Rows Charted on Ordinary Lines

If we put some spaces on the left end of round ten, that will force all the symbols to the right. So we'll add one space at a time until the yarnovers in round ten are exactly above the first and last stitches of round nine.



Ah ha! As it turns out, we had to add only a single space to the left of round ten to make it align properly.

Some knitters might like the chart just like this, even at the (admittedly small) price of adding a single space to only the topmost line. Keep in mind, though, that if we’re constructing a chart of any size, it can get unwieldy to do all the alignment ourselves.

In that case, we have the other option, putting each chart row/round in its own table row.

The Chart in a Table

Here’s the chart in a standard multi-column, multi-row table.

○																		○	10	
																				9
○																			○	8
																				7
○																			○	6
																				5
○																			○	4
																				3
○																			○	2
																				1

There are no spaces anywhere around the pattern rows or row numbers, including the space that we had added to round ten in the previous option, because the table handles that for us. Both the middle and right columns have been set to center their contents. The row numbers’ alignment doesn’t really matter—it can be left justified, centered, or right justified as preferred—but the center column usually needs to be centered to keep the stitches aligned properly.¹

¹ I can imagine a situation where an increase (or decrease) pattern might need to be left- or right-justified instead of centered. Suppose we’re making some sort of shaped border on the right and left edge of a square or

What is that skinny column on the left? That's the column that would ordinarily hold the private-side row numbers. But since we're working a sock in the round, we don't need that column. Since the column is empty, resizing the table columns to fit their contents means that the left column is the width of the combined left and right cell margins.

Comparison of the Two Techniques

Note that in the table, the row/round numbers are all in a vertical line instead of being closer to their stitch symbols, like they are in the version made in ordinary lines. Of course, we could get the row numbers in a straight column on ordinary lines by using a whole bunch of spaces. And we could get row numbers next to stitch symbols in a table if we just put them in the same column as the symbols.

Some people might prefer the row/round numbers to be closer to the symbols, while others might prefer them to be vertical.

The great thing is...

Charter's choice.

Typing Up the Charts

As with charts showing decreases, I make charts with increases from the bottom to the top. I can't keep straight the increases and the plain rows in between if I try to type the chart from the last row to the first row.

So I make a chart with a couple of rows, click in the proper cells, and type whatever's needed in each cell, whether a row number or the stitch symbols. When I've entered the symbols in the top row of the short table I started with, whether it was one row or ten rows tall, I add some more rows to the top of the table and keep working my way upward.

Charts Don't Have to Be Square

In the two previous projects, the purl diamond and the Aran sampler, the charts had the same number of stitches on every row. Because of that fact, their charts were rectangular.

But charts don't have to be rectangular, as the mitten-fingertip and toe-up sock sampler charts showed, to have their stitches in proper relation to one another.

rectangular project. We increase on one border-pattern edge for several rows, then decrease on the same edge back to the original number of stitches. One vertical edge of the pattern will be straight while the other will meander side to side as the number of stitches on each row changes. In such a case, you'd want the shaped border's table column to be left- or right-justified to whichever of the two vertical edges is the straight one.