## Chapter 230

## TWEAKING A PATTERN

Sometimes we might want to fiddle with the details of a pattern chart. Since a chart shows us a good representation of what the actual knitting will look like, we can do quite a bit of experimenting before we ever cast on. ${ }^{1}$

Let's take a critical look at the full chart of all sixty rows of the basket-weave hot pad.


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## Tweak the Top Edge

Look at rows seven and eight, then look at rows fifty-five and fifty-six.
Between the bottom border and the row of original purl blocks, there are two rows of stockinette stitch. But between the top border and the last row of purl blocks, there is only one row of stockinette.

## Option 1: Add the Second Row of Stockinette

The last few lines of the chart would have to be changed to have two rows of stockinette before the top border:


But do you see the complication that has now been added?
The left and right garter-stitch borders do not now mesh neatly with the garter-stitch top border. Look at the first several rows again:


See how the bottom garter-stitch border joins smoothly and exactly to the garter-stitch side borders?

The pattern designer is in a bit of a dilemma. But the missing row of stockinette is probably much less noticeable than the disjointed, disrupted garter stitch between the top and side borders would be.

## Option 2: Fudge the Side Borders

What if we just move the left and right borders up one row so that they blend correctly with the top border after we add the second row of stockinette?


How bad will the side borders look, now that the garter stitch has been interrupted? The slight hiccup may not look as bad in the knitting as it does on the chart. We just have to-groan-make a swatch to see.

## You Are Your Own Designer

Since you can now design your own patterns, you can choose whichever solution you like.
A good alternative, if you really want the top and bottom to match, would be to change the entire border to seed stitch. A top border of seed stitch would blend in perfectly with side borders of seed stitch, and you can start seed stitch easily after you have worked two rows of stockinette above the final row of blocks.

## More Tips Available

Appendix 515 is devoted to borders and contains information I found in the course of swatching.

## Variation \#l: Tweak the Last Row of Blocks

You may have noticed that the bottom row of blocks and the top row of blocks do not match, because the top row of blocks is a row of offset blocks. If we wanted the top row of blocks to match the bottom row of blocks, we would have to add some plus rows to the end of the pattern to get that effect.

In the same way, some knitters might prefer to not have the partial blocks right up against the side borders on the rows of offset blocks. It might look cleaner, or the preference may simply be, to have only whole four-by-four blocks on those rows. To achieve that effect, we have to have plus stitches for the right and left edges of the chart.

Let's look at a version of the complete chart that is slightly shorter. Since the original instructions said to repeat rows seven to eighteen three times, let's delete two of those row re-
peats, from row thirty-one to row fifty-four. (The original row numbers will be retained for the time being so that we can keep track of the exact rows that have been omitted.)


This reduced chart leaves the top and bottom garter-stitch borders intact, and we still have two full repeats of the two rows of blocks.

One of the changes we want to make is to end the piece with a row of original blocks instead of a row of offset blocks. So let's copy the chart rows that contain the row of original blocks (rows nine through twelve) and position them above row thirty.


Whoops! Now the row of original blocks is directly on top of the row of offset blocks. We better copy in rows seven and eight to put the stockinette stitch between the last two rows of blocks.


That's better.
Now, in this shorter version of the chart, we still have only one row of stockinette between the last row of blocks and the top border of garter stitch. In this truncated chart, that row is still labeled row fifty-five.

So far the changes we've made have not disturbed the continuity of the garter-stitch left and right borders where they meet the garter-stitch top border. But we still can't put a second row of stockinette before row fifty-five and keep the garter-stitch borders uninterrupted where the top border meets the left and right borders. It just can't be done. Our choice on this issue is the same as it was before.

But we can fix the partial blocks that bump into the left and right borders. We'll just select those purl stitches and replace them with knit stitches (stitches five through seven and thirty-four to thirty-six on rows fifteen through eighteen and twenty-seven through thirty).


Let's determine the new stitch and row repeat for this variation. To make things easier, we'll do a border-ectomy (and as a bonus, we can use a bigger font size).


Since we've eliminated the garter-stitch borders that made it impossible to have two rows of stockinette above the last row of blocks while keeping the top border meshed properly with the left and right borders, let's put two rows of stockinette at the top, since we might want to do, for example, a seed-stitch border. We had copied over rows nine through twelve to repeat the original row of blocks as the last row of blocks, so we'll copy the two rows of stockinette that follow them and paste them in to be the two rows of stockinette to make the top edge mirror-image the bottom edge.


## Are We There Yet?

Does this chart now reflect the changes that we wanted to make?
One goal was to eliminate the partial blocks that touched the left and right borders. This chart has fixed that problem.
Another goal was to have a row of original blocks at the top edge, to match the bottom edge. Repeating at the top of the chart the six rows needed for the row of original blocks has fixed that problem.

And finally, since we've eliminated the borders, we have two rows of stockinette at the top of the chart to match the two rows at the bottom of the chart. (And of course, those two rows top and bottom match the two columns of stockinette stitch at left and right.)

Now that we have the project mini-chart laid out the way we want, let's figure out the new pattern repeat, showing all the plus stitches and plus rows.

## Find the Pattern Repeat of Variation \#l

First, let's renumber the rows, or we'll have confusion since there are two sets of rows labeled seven through fourteen. Since we're not going to try to force garter-stitch borders, which we already know we can't do with perfect results, we'll renumber both the rows and the stitches starting from one.


Since the row of original blocks (in what used to be chart rows seven through twelve and is now in rows one through six) is identical to the one in chapter 220, we can just use the stitch repeat we already found for those rows.


Stitches one through six form the stitch repeat for these first six rows, and stitches
thirty-one and thirty-two form the plus stitches for those rows, making the whole piece symmetrical.

## Find the Stitch Repeat in the Row of Offset Blocks

Let's look at the row of offset blocks, which now doesn't match what we had in chapter 220.


We can see at a glance that we have the same six-by-six groups of stitches forming the purl blocks and the stockinette between them, but we also have those large groups of knit stitches at the beginning and end of each row.

As we had two options in chapter 220, we have the same two options here as well.

## Option 1: Keep the Same "Rubber Stamp"

Some of us will want to put the repeat markers in these places

because this placement will let us use the same "rubber stamp" that we used on the row of original blocks.

As we saw in chapter 220, if we are putting stitch markers between each pattern repeat, we will have to move them every time we switch from one row of blocks to the other.


And exactly as in chapter 220, since we're working with just knits and purls, and because the number of stitches is the same on every row, we also have the option to have nice straight lines between the same pairs of stitches from the bottom to the top of the chart.

## Option B: Look for a Rectangular Pattern Repeat

Let's see if running the repeat markers in the row of original blocks up through the row of offset blocks will work.


Does having the repeat markers in these same places help us?
Three of the four center groups (stitches seven to twelve, thirteen to eighteen, and nineteen to twenty-four) are all identical in this row of offset blocks, as though made with a rubber stamp (but a different stamp than that for the row of original blocks).

But the stitches before and after these three groups are not alike. The group from stitch one to stitch six doesn't match the group from stitch twenty-five to stitch thirty. We still have that group of stitches in thirty-one and thirty-two as well.

## Resolving the Stitch Repeat

Let's put the charts of both rows of blocks together.


Now look at each group of stitches between the repeat markers.
We can see again that we have identical groups across all twelve rows in three of the stitch groups: seven to twelve, thirteen to eighteen, and nineteen to twenty-four.

But again, stitches one through six do not match stitches twenty-five to thirty. They're just different, matching neither the three identical groups nor each other.

Do you see it? We have three groups of stitches that are absolutely identical. They're so identical that we could have thirty or three hundred of them, to make a project that was somewhat wider or a lot wider.

But the stitches that come before and after those three groups... Those two groups of stitches are all plus stitches in this new configuration. Remember, we didn't want partial blocks on the rows of offset blocks. So when we changed those purl stitches to knits, that altered what we had to do before the first stitch repeat and after the last stitch repeat on the row of offset blocks.

Maybe it will be clearer without one of the repeat markers.


How does this version strike you? The three stitch groups between the four repeat markers are all identical. Since they're all identical, they make up the pattern repeat.

The stitches before the first repeat marker and the stitches after the last repeat marker both constitute plus stitches. We must have plus stitches both before and after the stitch repeat.

So here's the chart for the stitch repeat, using letters instead of numbers, since we now have fewer than twenty-six stitches.


Stitches $G$ through $L$ form the pattern repeat. You would repeat those six stitches over
and over and over across the width of the project. The more stitch repeats you have, the wider the item will be.

But stitches A through F and stitches M through T are all plus stitches. Here, finally, is a pattern with plus stitches before and after the pattern repeat, and the two groups of plus stitches happen to be different from each other.

## The Row Repeat

Let's go back to the full chart so we can find the row repeat.


Which row duplicates row one, as row one relates to the rows that follow?
Clearly row two, even though it is also a row of stockinette, does not fit this criterion. So what is the difference about row one? What is its function in the chart? Row one is the first stockinette row below the row of original blocks.

Rows seven and eight are the two stockinette rows below the row of offset blocks.
What about row thirteen? Row thirteen is the first of two stockinette rows below the second row of original blocks.

Let's double-check. Rows one and thirteen are indeed the same. That means rows two and fourteen, rows three and fifteen, and rows four and sixteen also must be the same.

If row thirteen is the same as row one, then row twelve must be the last row of the pattern. So let's see if row... Which row do we have to look at? If row thirteen is where the rows start repeating, which row has to match row twelve? In other words,

Row 1 to row 12 needs to be the same as row 13 to which row?
Twelve minus one is eleven, so add eleven to thirteen to see which row has to be the same as row twelve. Eleven plus thirteen is twenty-four, so we have to see if row twenty-four is the same as row twelve.

Are rows twelve and twenty-four the same? Yes, they are. Both rows show the top edge of the row of offset blocks.

So the row repeat is rows one through twelve, repeated over and over again until the piece is long enough. (Or we're starting to get low on the project's yarn, or we're just tired of this project, or...)


## Are We Done Yet?

Suppose we're using the chart above to make our blanket. We're knitting along, working rows one through twelve over and over. But if we stop at row twelve of the pattern and move immediately to the top border, do we get the result we want? Let's look back at the twelve rows of the pattern repeat one more time.

If we go straight from pattern row twelve to the top border, we have missed two things:
We end with a row of offset blocks, which we didn't want to do.
We don't have two rows of stockinette between the last row of blocks and the top border.

## Finding the Plus Rows

Let's look again at the last two rows of blocks from the full chart. We already determined that row twenty-four is the last row of the second row repeat, so let's start there.


Row twenty-four is the top edge of the row of offset blocks. Rows twenty-five to thirtytwo solve both issues noted above: ending with a row of original blocks, and having two rows of stockinette between the last row of blocks and the top border.

That means that rows twenty-five to thirty-two are the plus rows for this variation of the basket-weave pattern.

Remember, plus rows are done only once, at the beginning and/or end of the entire piece, to make the top and bottom edges of the pattern area be symmetrical (or to neatly start and/or finish a pattern that is not symmetrical). Once you've worked two, twenty, or two hundred repeats of rows one through twelve, you work rows twenty-five to thirty-two just once.

## A Complete Chart for Variation \#1

Now that we've identified all the stitches and rows from the big chart, we can construct the final working chart for the variation of the basket-weave pattern that eliminates partial blocks at the left and right edges and that puts a row of original blocks at the top of the item to match the one at the bottom.


## Interpreting This Chart

This chart looks quite a bit different from what we started with. So how do we work from this chart?

Remember that we have to have special areas on the chart to account for the tweaks that we wanted: avoiding partial blocks on the right and left edges, and finishing with a row of original blocks and two rows of stockinette at the top of the piece.

## The Stitch Repeat and Plus Stitches

To make sure we don't have partial blocks on the edges of the row of offset blocks,
we need stitches A through F to omit a partial block from the right edge of the project, and
we need stitches $M$ through $T$ to omit a partial block from the left edge of the project.

Note that on the row of offset blocks, there are five knit stitches before the first block and after the last block, which keep the row of offset blocks symmetrical.

The stitch-repeat markers define the right-edge plus stitches (stitches A through F), the
stitch repeat itself (stitches G through L), and the left-edge plus stitches (stitches M through T).

## The Terse Stitch-Repeat Description

When we see patterns in a stitch dictionary, the first line usually says something like "multiple of $12+3$ " or even just " $10+2$."

Now we know that the basket-weave stitch repeat is six stitches wide, so " 6 +" will be the first part of our terse description. What number do we put after the + for the number of plus stitches?

Since we have two groups of plus stitches, we have to add the number of stitches in both groups together for the second half of the terse description. The first group is six stitches wide; the second is eight.

That means " $6+14$ " is the terse description of the stitch repeat for this version of the basket-weave pattern.

## The Row Repeat and Plus Rows

Rows one through twelve, worked over and over, will give us paired rows of blocks, a row of original blocks and a row of offset blocks.

But to make sure that the final row of blocks at the top of the piece is a row of original blocks, we work rows thirteen through twenty just once, after we have worked as many repeats of rows one through twelve as wanted or needed. Rows one through twelve are the row repeat, and rows thirteen through twenty are the plus rows.

This chart happens to have only one set of plus rows. Other patterns may have plus rows both before and after the row repeat, or only before the row repeat.

## Even Plus Rows Can Have Stitch Repeats

Look back at stitches $G$ through $L$ on rows thirteen through twenty. That group of stitches has to be repeated across the top edge of the piece. Why? Because those stitches make the final row of original blocks, except for the first block and the last block.

If we wanted to, we could have the plus rows as a separate chart with fewer stitches:


According to the rules of interpreting charts, we work stitches A through F over and over across the plus rows, then we work stitches G and H just once, as plus stitches.

Why can we simplify the plus rows this way? If we compare that smaller chart to the section of the chart showing just the plus rows, we can see that stitches A through F on rows thirteen through twenty are the same as stitches $G$ through $L$ and $M$ through $R$ on those rows.


We might not always have this kind of situation, but if it's there, we can feel free to split the chart into different pieces to simplify it. Doing so will often let us use a bigger font size -one more bonus.

## Charts for Variation \#1

We can actually do the "final" charts two ways.

## An Extended Version

This layout is more explicit, but it takes up more space.

## Basket-Weave Variation Main Pattern Rows

multiple of $6+14$
Work rows 1-12 as many times as desired.


## Basket-Weave Variation Plus Rows

Work rows 13-20 after completing the final set of main pattern rows.


## The Most Compact, and Easiest, Version of All

This is a no-brainer (but I still almost missed it-a "forest for the trees" kind of thing!).

## Basket-Weave Variation

multiple of $6+14$
Work rows 1-12 as many times as desired. Then work rows $1-8$ once.


## More Ways to Tweak a Pattern Chart

Let's see what other ways we can change the original basket-weave chart.

## Variation \#2: Make the Purl Blocks Bigger

If we want to increase the scale of the basket-weave pattern, so that the blocks were much bigger for a blanket, it's simple to make each purl block both wider and taller. We already saw in the purl-diamond project how to scale a motif's size.

Here's a basic chart with eight-by-eight purl blocks with four stitches and four rows of stockinette between the blocks. As an exercise, figure out both the stitch and row repeat of this enlarged pattern, then check your chart against the Answers.


## Variation \#3: Make the Purl Blocks a Measured Size

What if we wanted our blocks to be a specific measurement, say one inch square, instead of a certain number of stitches and rows?

We would have to use our stitch and row gauges to determine the width and height of each block. So if we get five stitches and seven rows per inch in stockinette, then for one-inch-square purl blocks, we would have to make them five stitches wide and seven rows tall.

What if we want a quarter of an inch between the blocks? We would need one-quarter of five stitches between the blocks in each row, and one-quarter of seven rows between rows of blocks. Since neither five nor seven is evenly divisible by four, we have to choose either one or two stitches between blocks horizontally and two or three rows of stockinette between rows of blocks.

We can select between two and three rows as we wish, but having a single knit stitch between blocks horizontally might mean that we won't see that stitch at all. If we select having two stitches between blocks, then it will be impossible to center the offset blocks above the first row of blocks. So we'll put three stitches between blocks on the same row as well as three rows between rows of blocks.

The following chart shows such a pattern.


But we don't have to center each row's blocks above the previous row's. We could do several rows of blocks that keep moving over a stitch or two, which would give a completely different effect.


We could also shift them back and forth to create a herringbone pattern.


With a computer and the knitting font, we can go wild designing new patterns. We can save each one as a separate file and create our own stitch dictionaries, and we can do it all without casting on a single stitch.


[^0]:    ${ }^{1}$ The goal is to avoid frogging and reworking, especially in a grabby yarn or one that otherwise wouldn't respond well to frogging.

