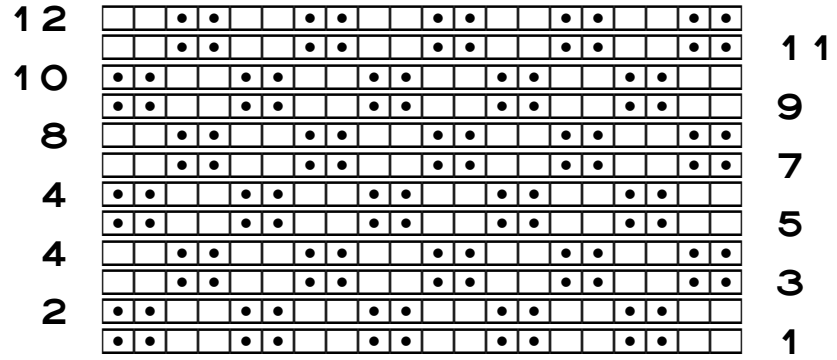
Appendix 510

ANSWERS

Here are the answers for the exercises suggested throughout the book.

Written-Out Instructions for the Alternate Moss Stitch

Here's the chart.



The first two rows of the alternative version of the alternate moss stitch are exactly the same as for 2x2 ribbing, then we break the 2x2 ribbing by moving the pattern over two stitches for two rows.

There are several ways to write out the instructions.

Alternate Moss Stitch: Option 1

CO 20.
Row 1 (RS): * K2, P2 *, rpt betw * across.
Row 2 (WS): * K2, P2 *, rpt betw * across.
Row 3: * P2, K2 *, rpt betw * across.
Row 4: * P2, K2 *, rpt betw * across.
Rpt rows 1–4 two more times (12 rows total).
BO.

You could also simplify to these instructions:

Alternate Moss Stitch: Option 2

CO 20.
Row 1 (RS): * K2, P2 *, rpt betw * across.
Row 2 (WS): Rpt row 1.
Row 3: * P2, K2 *, rpt betw * across.
Row 4: Rpt row 3.
Rpt rows 1–4 two more times (12 rows total).
BO.

The most compact form is

Alternate Moss Stitch: Option 3

CO 20.
Rows 1 (RS) and 2 (WS): * K2, P2 *, rpt betw * across.
Rows 3–4: * P2, K2 *, rpt betw * across.
Rpt rows 1–4 two more times (12 rows total).
BO.

Some books may do the instructions this way.

Alternate Moss Stitch: Option 4

CO 20.
Row 1 (RS): * K2, P2 *, rpt betw * across.
Row 2 and all WS rows: Work the sts as they present themselves.
Row 3: * P2, K2 *, rpt betw * across.
Rpt rows 1–4 two more times (12 rows total).
BO.

Creating a Project Chart with Multiple Patterns

The exercise was to figure out the least common multiple for patterns that are six, ten, fourteen, and twenty-two rows tall (again, we are ignoring foundation rows any pattern may have).

If we put those numbers into an Internet least-common-multiple calculator, we would find out instantly that to create a project chart that had complete copies of all four patterns with no gaps anywhere, we would need a chart with…2,310 rows!

Yowsa!

We'd need 385 repeats of the six-row pattern, 231 of the ten-row pattern, 165 of the fourteen-row pattern, and 105 of the twenty-two-row pattern.

What to Do If the Number Is Big

It's highly unlikely that we would ever need a project chart that had so many rows in it. Even a scarf that's sixty inches long at ten rows per inch would have only six hundred rows.

If we pick patterns that, when combined in our project chart, require such a hugely impractical and/or unneeded number of rows, then we can simply do the copying of patterns ***starting from the bottom of the chart and copying upwards***, for as many rows as we need. Then we just lop off the extra pattern rows at the top.

The Exercise as a Sweater

Suppose we had picked those four patterns to make a sweater. If we use worsted-weight yarn, we'll probably get seven or eight rows to the inch. Let's assume we actually get ten rows per inch, just to make the arithmetic easier.

Many sweaters are about twenty-eight inches long, as measured from the edge of the bottom ribbing to the top of the back of the neck. At ten rows per inch, we only need 280 rows on the project chart to show every single stitch of these four patterns.

Once we had copied all the patterns to fill the entire project chart's 280 rows, we just end each pattern at whichever pattern row happens to fall on that chart row.

Some Tweaking May Be Necessary

Note that we may want to be careful with cable and twist patterns. The top edge will probably look better if cable patterns end about halfway between crossings, instead of right before or right after crossing.

If we lop off the unneeded pattern rows based on the number of rows we need for the length we want, we may find that we do, for example, a cable in an awkward spot. We may have just completed a crossing, or we may be ending at the row right before a crossing. If it's a long-ish cable, like with an eight-row repeat, we might want to have the final row be three or four rows either before or after the crossing. For appearance' sake, we probably want at least a couple of plain rows after a crossing to avoid a tight hump at the shoulder, and we'd want to end several rows before a crossing to avoid a long, uncrossed column of knit stitches above the final crossing.

The Bottom Line of Combining Patterns

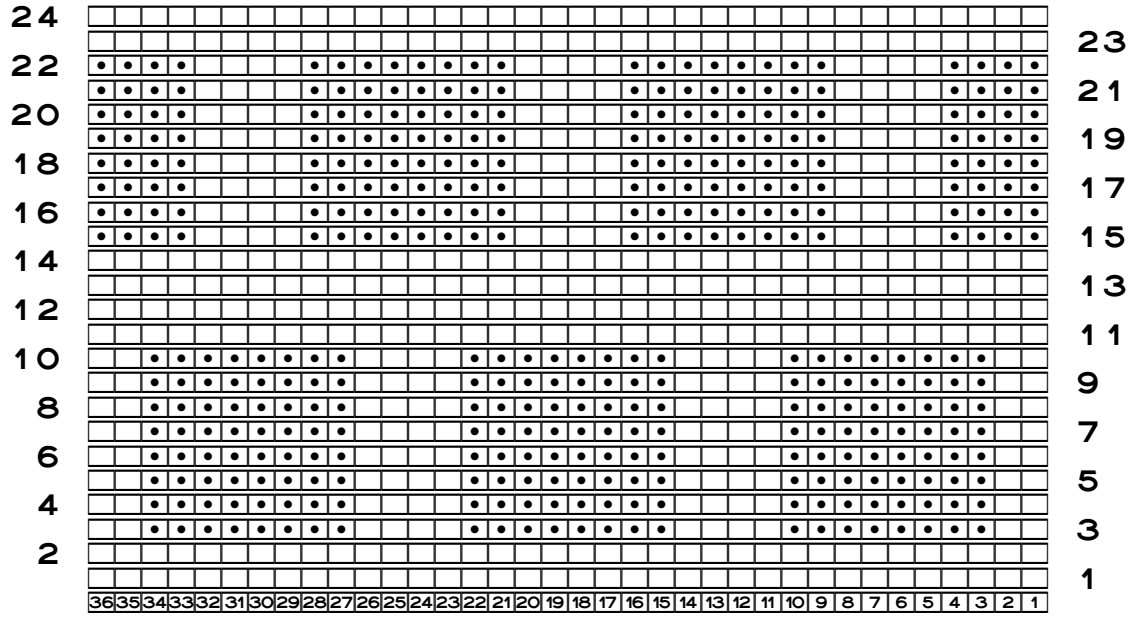
Depending on the patterns involved, we might be able to just figure out in our head the number of chart rows we'd need. If the patterns are short enough, we might need only two

or three copies of the tallest pattern to have enough total rows to fit all the patterns evenly in yhe project chart.

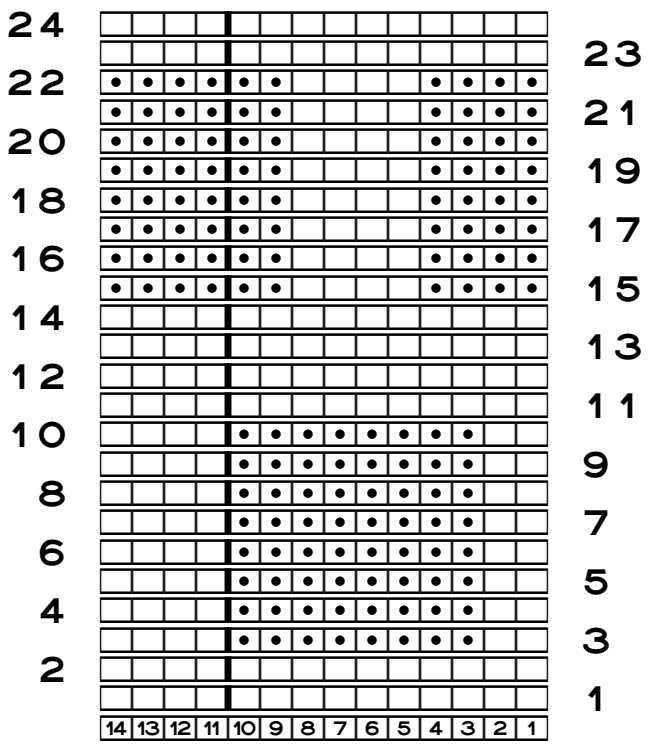
But if we need more than a handful of copies of each pattern in the project chart, or if doubling, tripling, or quadrupling the tallest pattern still won't allow all the other patterns to fit in evenly, then using an online calculator is the quick solution.

Eight-by-Eight Basket-Weave

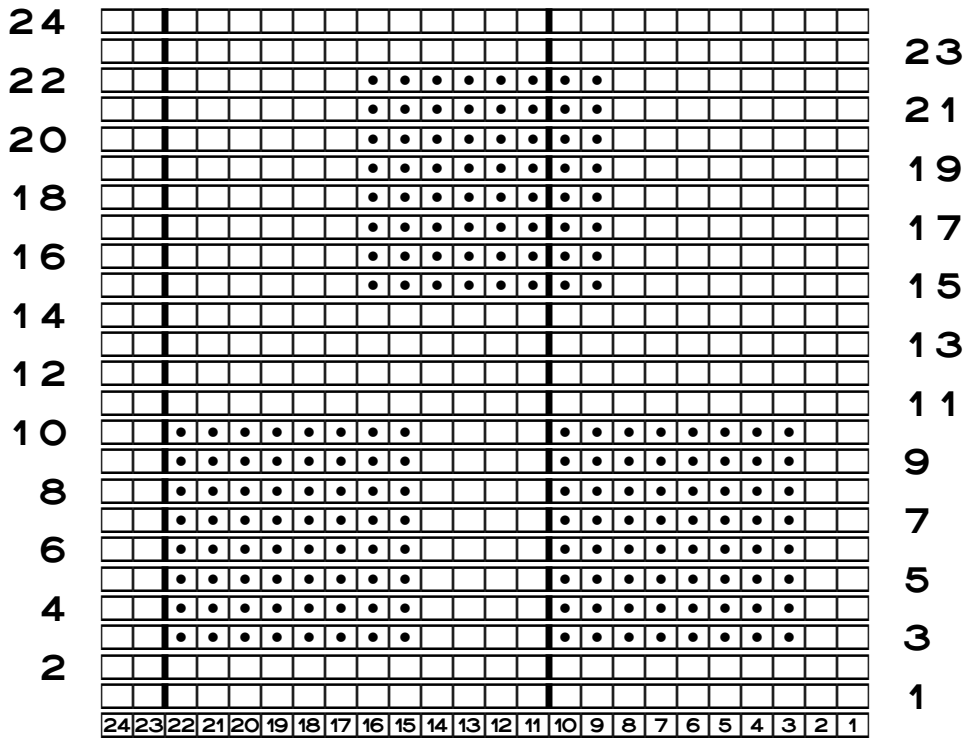
Here's the basic chart.



Using the standard procedure, the pattern repeat is



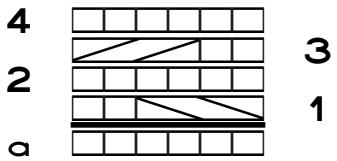
If we wanted to avoid partial blocks on the rows of offset blocks, then the chart would be



If we wanted to end the project with a row of original blocks, we would repeat rows one through twelve as the plus rows after working the twenty-four chart rows as often as desired.

Upside-Down Braid

The chart in chapter 140 was



so the written-out instructions are

Upside-Down Braid

multiple of 6
C4R: put 2 sts on cn and hold to back, K2, K2 from cn
C4L: put 2 sts on cn and hold to front, K2, K2 from cn
Foundation row A and all WS rows: P.
Row 1 (RS): C4L, K2.
Row 3: K2, C4R.
Rpt rows 1–4.

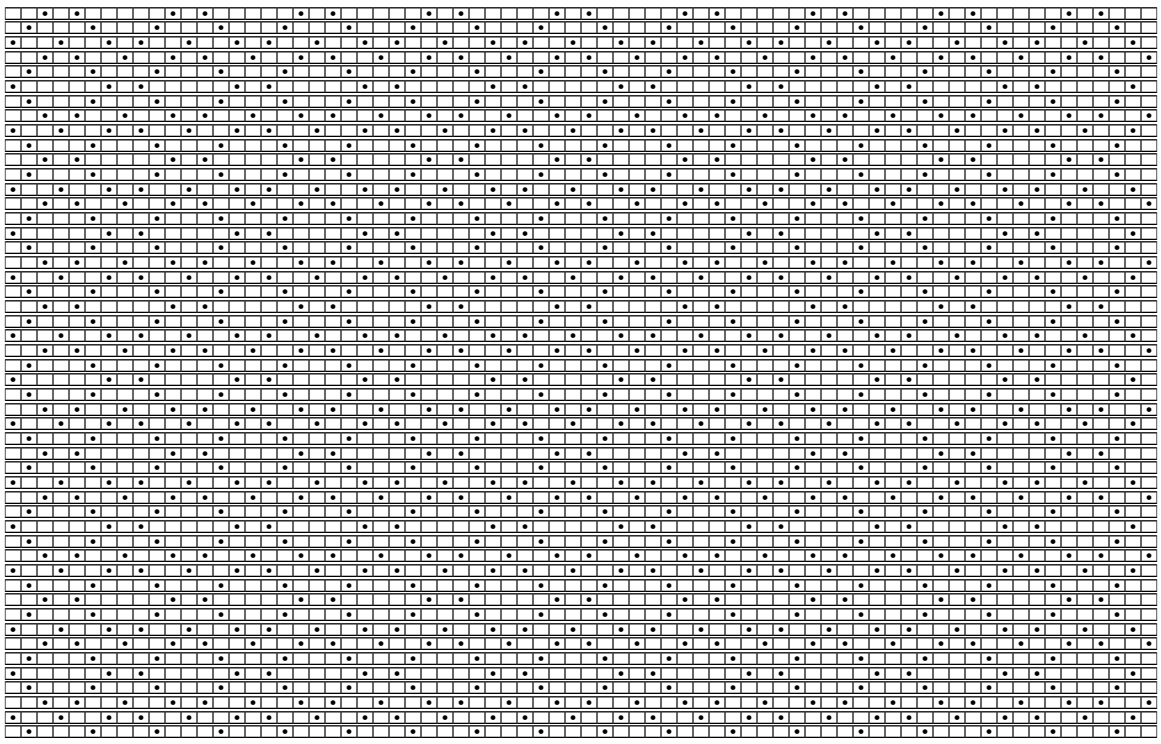
Variations on Interlocking Diamonds

In chapter 230, we arranged the diamond motif in two ways that took advantage of its diagonal shape.

The suggested exercise was to create pattern charts for both those variations as well as an additional set of pattern charts that avoided partial motifs on all four edges.

The Hiccup Variation

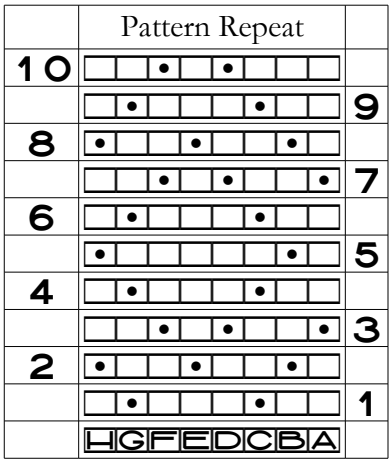
The first variation was



which had the diamonds positioned so that there were hiccups as we followed, say, the upper-left edge of a diamond from the lower left of the chart upward and to the right.

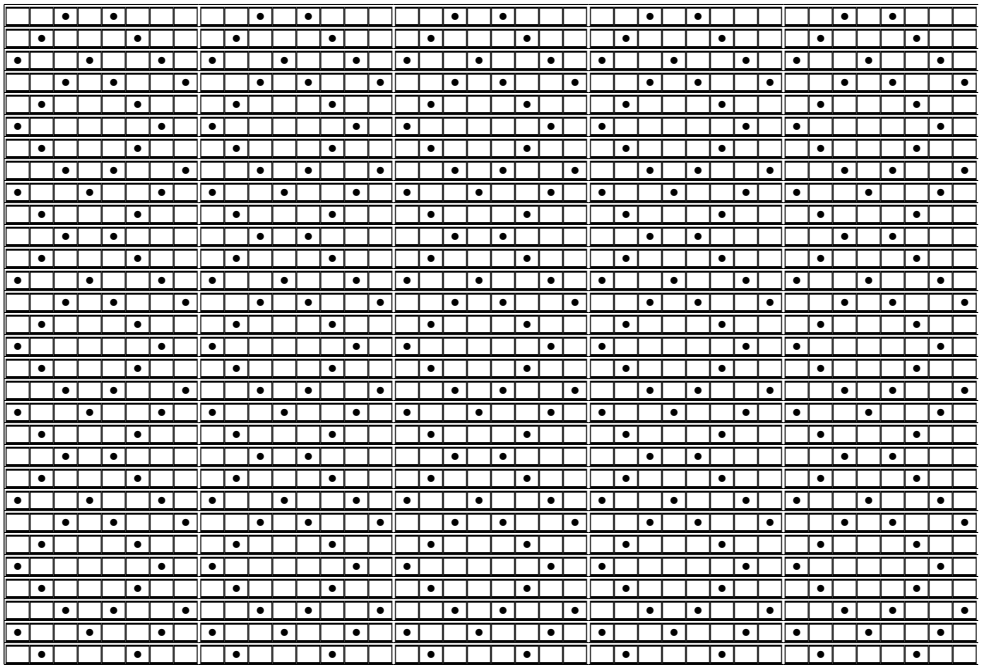
Charts for the Hiccup Version

We use the standard procedure from chapter 220, and since the diamond motif is our design element, we'll choose to have a whole diamond in the pattern repeat.[1] Note that we've left a knit stitch to the right of the right corner and below the bottom corner of the complete diamond.

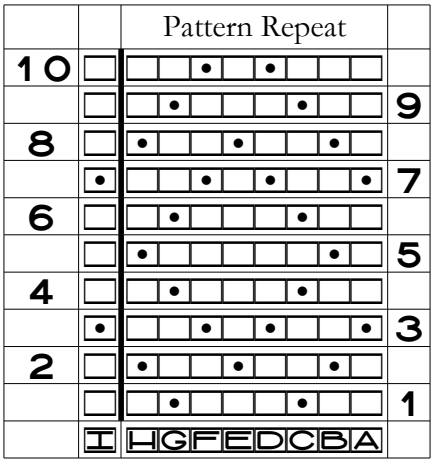


Here's what several repeats of the chart look like, just so we can double-check that the pattern repeat is correct.

[1] There are lots of ways to chart the pattern repeat, including some that don't show a full diamond in the repeat itself.



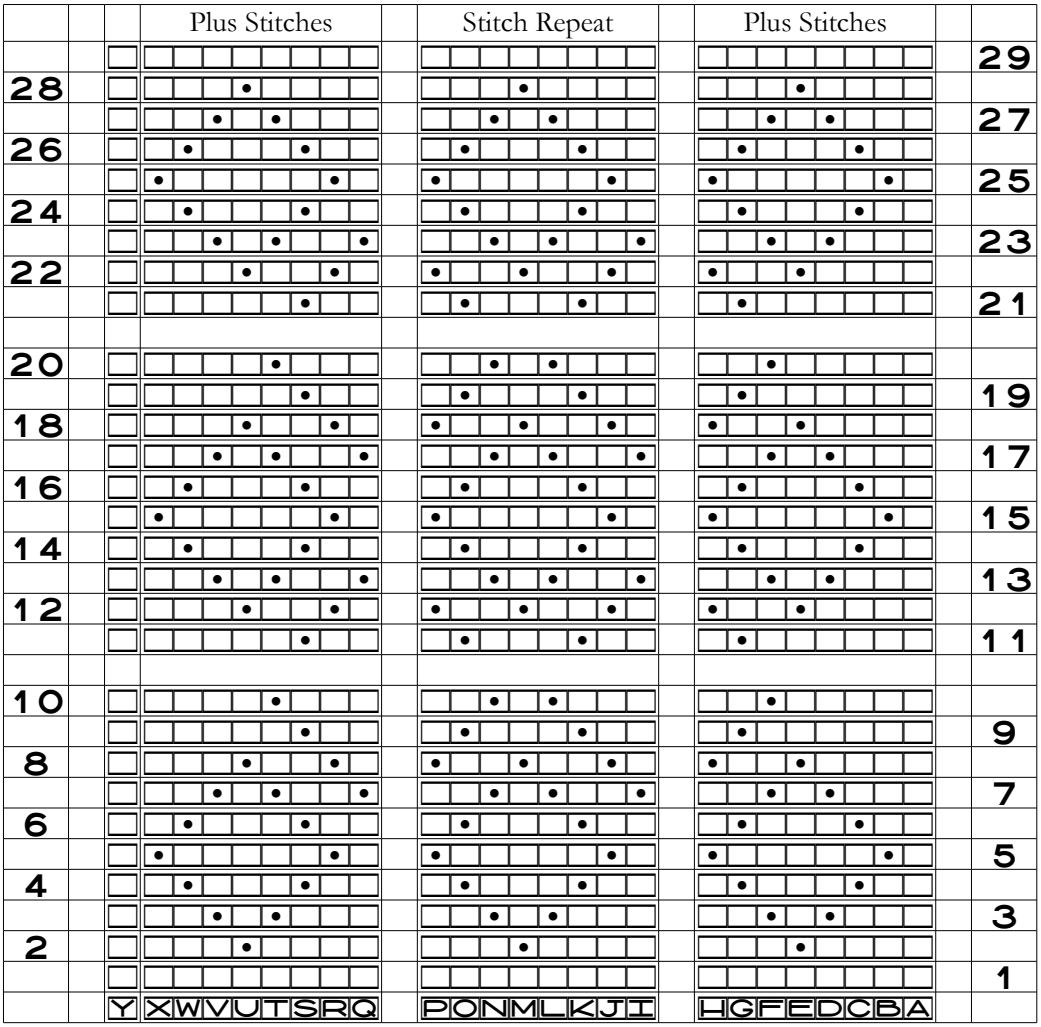
If we want the left edge to match the right edge, so that we have a knit stitch after the left point of the last diamond, then we need to add a plus stitch.



Variation for Whole Diamonds Only

For the version that has only whole diamonds, so that there are no partial diamonds on any of the edges, we need a chart with plus stitches and rows, just like we did in the basket-

weave variation. For complete symmetry, we'll make the top row of diamonds be the same as the bottom row.



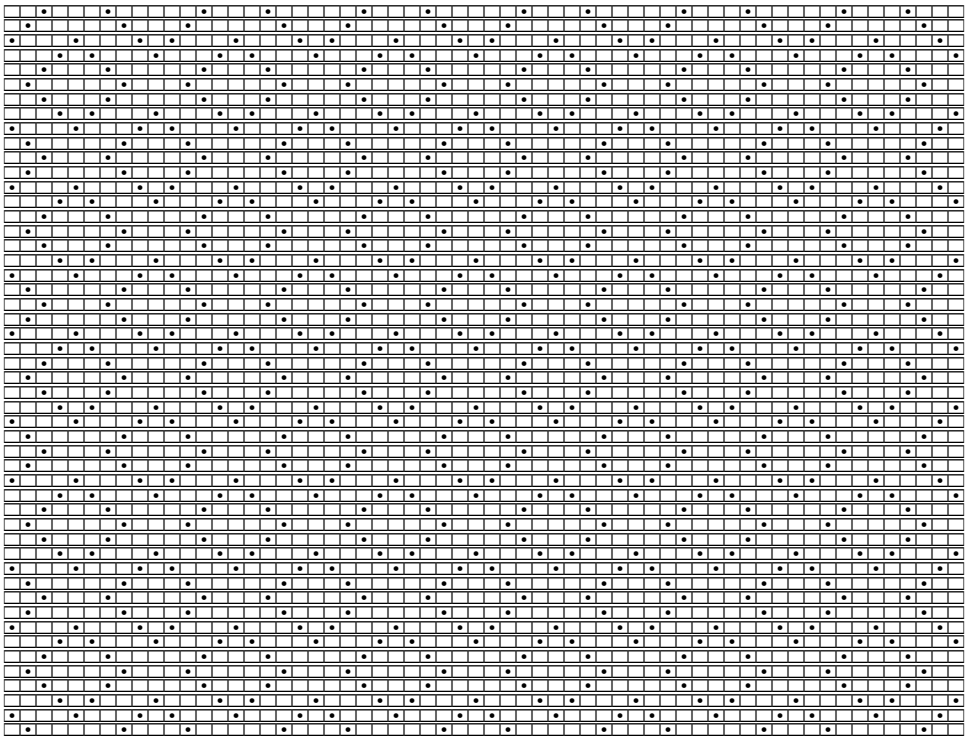
This chart uses a blank columns instead of the knitting font's repeat marker to show the boundaries between the stitch repeat and both sets of plus stitches. The blank rows are easy to use as the row-repeat marker if we don't want to fiddle with cell borders.

The plus stitches are stitches A through H and Q through Y. (Stitch Y was put into its own column, which is a bit easier than adding it to the left of every pattern row.) Rows one through ten and twenty-one through twenty-nine are the plus rows.

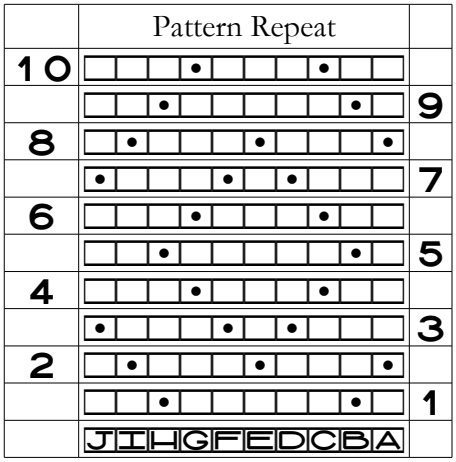
The pattern repeat is stitches I through P in rows eleven through twenty, which matches the pattern-repeat chart shown earlier.

The Aligned Variation

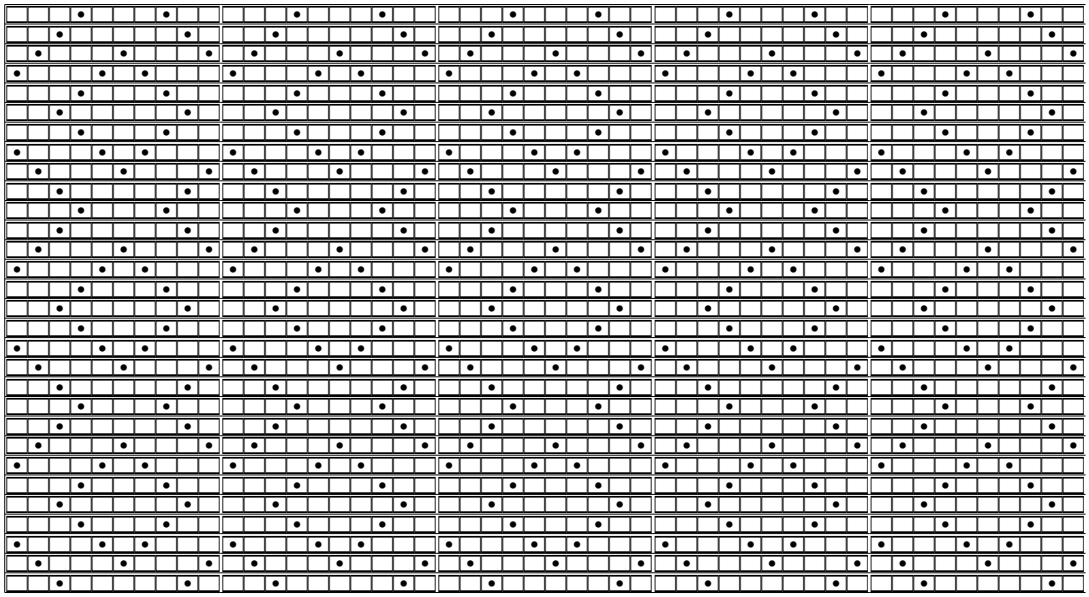
The second variation aligned the diamonds' sides by increasing the space between the motifs.



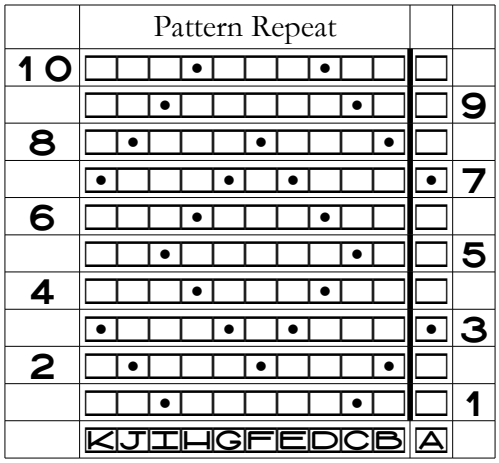
The pattern repeat that contains a complete diamond is



If we put several copies of the pattern repeat in a table with extra rows and columns, we can double-check its accuracy.

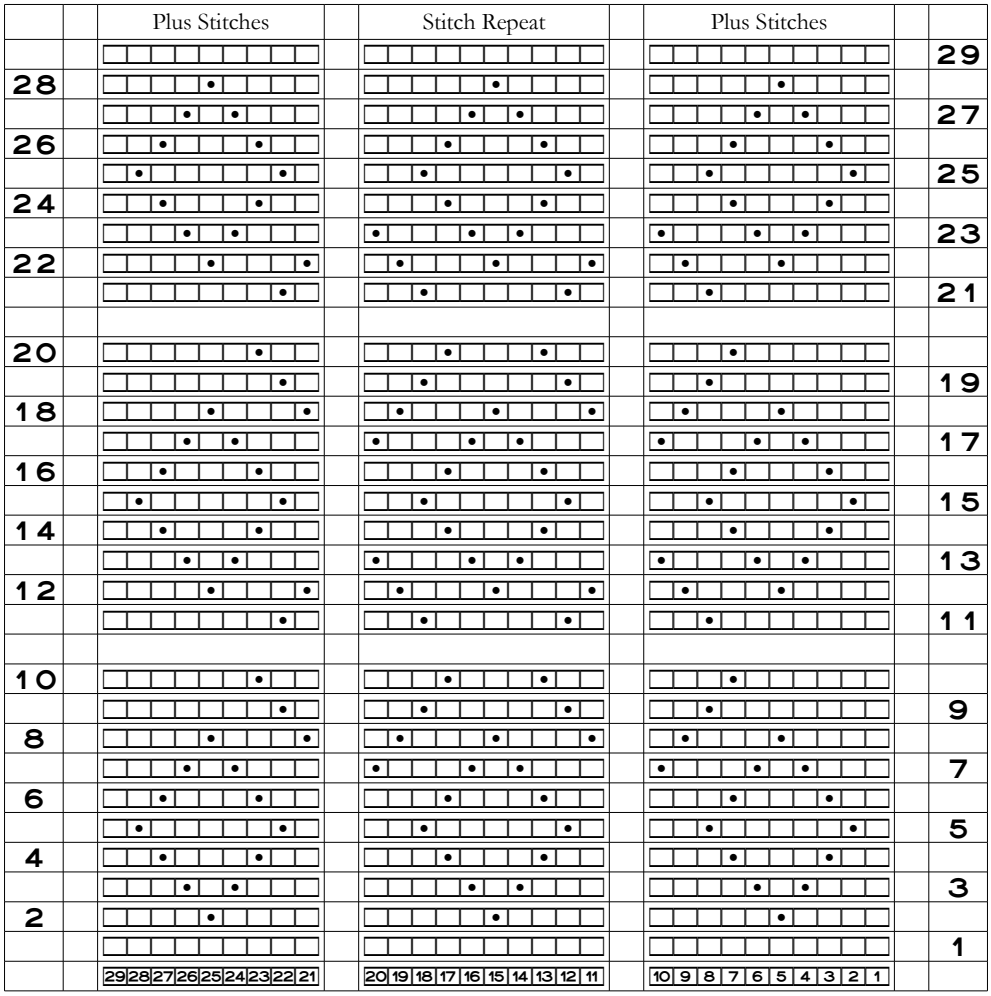


If we want the right edge to look like the left, then we need to add a plus stitch there.



Variation with Only Whole Diamonds

If we want whole diamonds only, we again need plus stitches and rows, determined by the normal method.



Since there are more than twenty-six stitches in the chart, we're using boxed numbers to identify them. The chart also deletes an extra all-knit row at the top as well as a column of knit stitches in what would have been stitch thirty, to keep the four edges symmetrical.

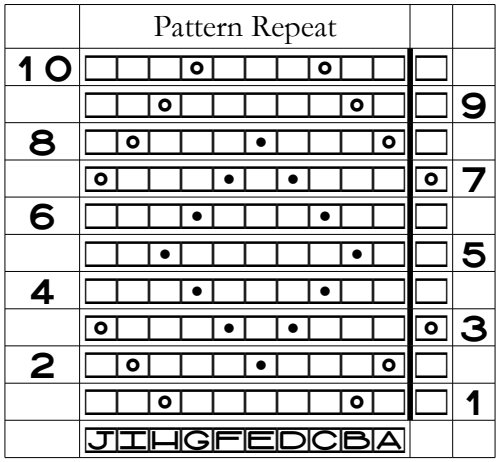
Stitches one through ten and twenty-one through twenty-nine are the plus stitches. Rows one through ten and twenty-one through twenty-nine are the plus rows.

The pattern repeat is stitches eleven through twenty in rows eleven through twenty, and it matches the original pattern repeat we determined earlier.

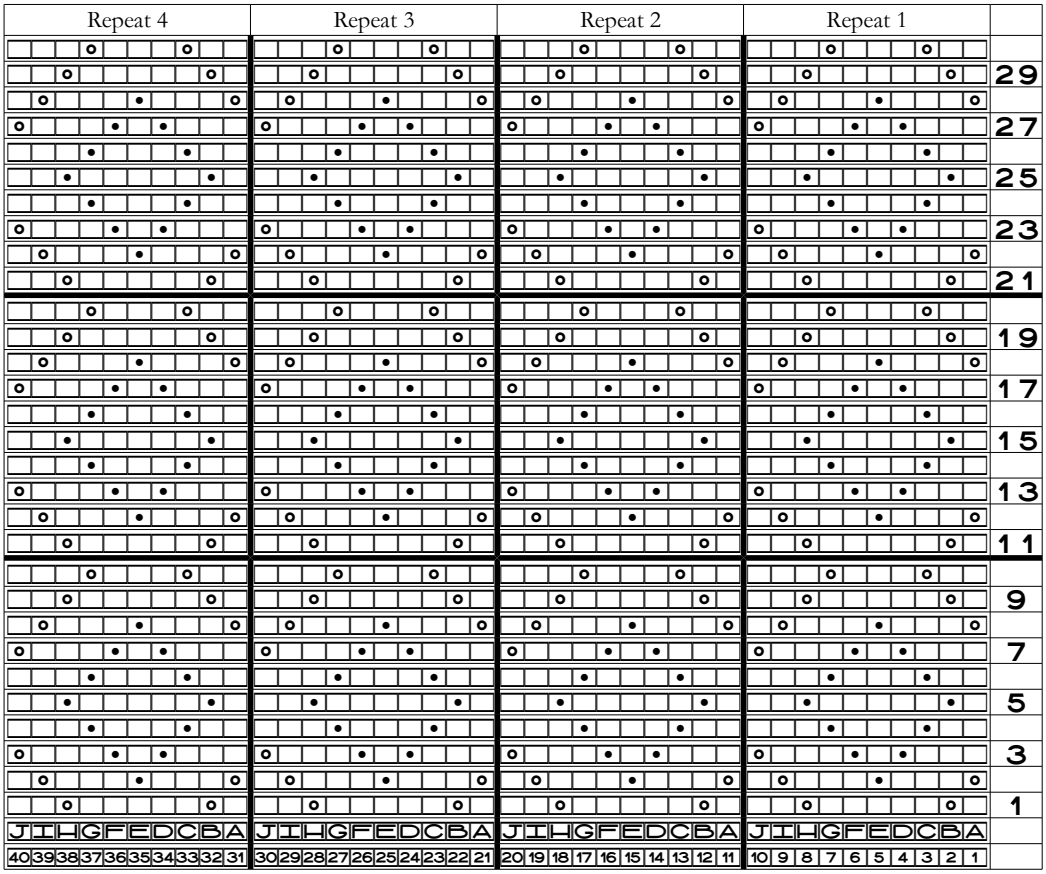
A Simpler Alternative

But what if we type up the original chart of the pattern repeat slightly differently? The only

thing we've done is substituted the symbol normally used for a yarnover in place of all the purl stitches that make up the partial diamonds in the corners of the pattern repeat.



Let's copy this chart several times both horizontally and vertically. There are heavy borders between the pattern repeats.



If we look carefully, we can see that where the copies of the pattern repeat touch one another (where stitches A and J are next to each other), we have full diamonds even where the stitch symbols have the open circles. The copies of the pattern repeat around the edges of the project chart (where the row numbers would be on the left and right, where the stitch letters are at the bottom, and below the heading row at the top) make partial diamonds where the open-circle symbols are.

We can use these facts to work the pattern repeat in such a way that we don't have to have a large chart that shows the plus stitches and rows explicitly. How?

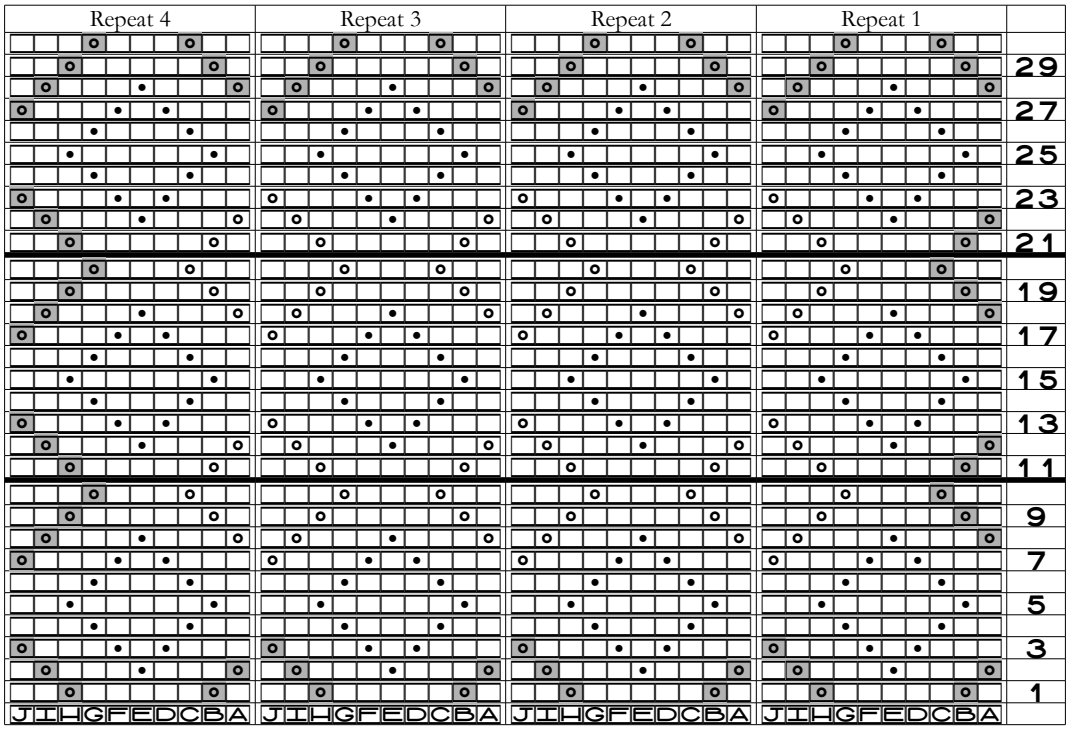
Since the open circles represent stitches that make only partial motifs, then we don't work them as purls except at places where ***four copies of the pattern repeat touch one another***.

So in the bottom three rows of the project chart, we have the top points of five diamonds (where the open circles are) and the bottom points of four diamonds (where the purl stitches are). Since we don't want partial motifs, then we would work all the open circles in

the bottom three rows as public-side knits. For the rest of the project, we work the open circles as public-side purls.

In the first full row of diamonds made with open circles, rows seven through thirteen, we would work those stitches as public-side purls only where repeat one touches repeat two, where repeat two touches repeat three, and where repeat three touches repeat four. We would work as public-side knits the open circles at the beginning of repeat one and the end of repeat four, because there is no pattern repeat before repeat one or after repeat four.

Let's highlight in the project chart the open circles that would be worked as public-side knits:



The interior stitches with open circles would be worked as public-side purls because when all the pattern repeats are worked, they'll form whole diamonds. But the ones around the edges that would form only partial diamonds would be worked as public-side knits.

The General Rule

So we can formulate a general rule for pattern charts that show at least one full and several partial motifs.

If we use a different symbol for all the stitches that make only the partial motifs, then

when we are working the first or last stitch repeat on a project row, we do not work the stitches making the partial motifs at the very edges of the piece, only the ones making the full motifs in the middle of the piece.

In the same way, when we're working the pattern repeat's rows the first time or the last time in the project, we again only work the stitches that form the complete motifs in the center of the item, not the stitches that make the partial motifs at the bottom or top edges of the item.

Then we don't have to have such a complicated chart to show the plus stitches and rows explicitly. We instead have some changes in how we ***interpret the chart*** while we're at the project's edges. And once we got used to the idea, we wouldn't even have to use a different symbol for the stitches that form only partial motifs in the pattern chart. We would simply realize, "Oh, at this point in working the project, I won't be able to make a full motif, so I'll just work these stitches as background knits instead of as motif purls."