

B e e l i n E

to simple pattern enlargement

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Are you a thrifty gal who would rather spend less and do more? When working with patterns like MaryJane's that require a mechanical enlargement, usually at your local copy center, these pattern-makers' tricks will save you money and give you that sense of accomplishment you can only get when doing it yourself. You might find that you like getting a bit mathematical and that you have a knack for accuracy you didn't know you had. I'll show you how to make two kinds of pattern enlargements that don't require a copy machine.

Radial Projection Enlargement

This method is great if you don't love making grids and if the idea of plotting points on a grid leaves you terrified or overwhelmed. It's also ideal for scaled patterns that have no grid lines or aren't in an easy scale for grid work.

You'll need: paper, pencil, ruler (see-through rulers are great for this kind of work), yardstick for long lines, curved ruler (optional).

You'll also need paper big enough to accommodate the blown-up pattern size—newsprint (it can be hard to see your lines due to the printing, though), craft paper, wrapping paper, or my favorite: cut-up and taped-together grocery bags. They're free, and this is a great way to make use of them, especially in a pinch.

First, figure out the enlargement ratio. For example, if your pattern is in $\frac{1}{4}$ -inch scale, $\frac{1}{4}$ inch equals 1 inch. If there is not a specific scale, establish one. You can figure this out easily if there is an enlargement percentage. For example, if a pattern has no grid but says "enlarge 800%," you can figure that $\frac{1}{8}$ inch equals 1 inch, and "enlarge 400%" means $\frac{1}{4}$ inch equals 1 inch. Modern books and magazine patterns

tend to be in these scales. If you run into an older pattern, you might have to “make do” and sometimes use an odd measure. There might be an indicator, like the length is 27 inches, then you can measure the scale length to see how it divides to get to 27 and get your scale that way. The most important thing is to keep the scale the same for all the pattern pieces you are enlarging.

Make a copy of the pattern you want to enlarge and cut out the small pieces. If it is a layered pattern (for example, an apron pattern where the pocket shape is inside the skirt shape), you might want to make enough copies to cut out each layered shape separately.

Tape the pattern shape you want to enlarge to the bottom left-hand side of your large piece of paper, leaving some space around it. Make sure your paper is large enough for the pattern piece once it is enlarged. You can always tape on extra paper, but it's good to be in the ball park so you don't have to stop mid-line.

From any point in the lower left area of the pattern, make a series of lines radiating out from the origin point (let's call that point the X point). It is important to radiate through all important places, like corners and curves, to get as accurate a shape as possible. It can be very helpful to make a 90-degree corner radiating from X to help situate the pattern piece and keep your lines matched up. This is especially helpful for curvy ruffles, collars, and sleeves that may not have a “built-in” 90-degree center placement (as though the pattern should be placed on a fold).

Measure the distance from X to each intersection (points A, B, C, etc.) on the small in-scale pattern, and multiply it by the corresponding enlargement number (for example, multiply by 4 for ¼-inch scale, by 8 for ⅛-inch scale). Measure that distance along the radiating line, extending beyond the scale pattern, and mark a point to match the intersection (A, B, C, etc.). Another easy way to determine how long the lines should be is to count up how many scale increments you measure and convert them to inches. For example, you measure a line that is 1½ inches. In quarter scale, that is six ¼-inch increments, and would convert to 6 inches. Easy. Using a see-through ruler or clear quilting ruler makes this method very easy, as you can see through the ruler to the lines beneath it, and these rulers often have very clear indications for ¼-inch and ⅛-inch increments.

When you have your intersections measured out, connect the points using a ruler. You can also make intersection points for grain lines, darts, pleats, notches, and other special markings like trim placement in the same manner as the outer edges.

Make sure you mark all labeling information (like cutting directions, seam allowance, etc.) on a larger scale so you remember to look at them when working with the pattern later. One other thing to keep in mind when enlarging patterns is the size of line you are drawing. If you use a pencil, you will get a nice thin line that is quite accurate, while if you draw over that with a felt-tip pen, the width of the felt tip can distort the accuracy of your pattern.

Grid Method

This is a good method to use if you like to be ultra precise and like counted cross-stitch, as it follows similar counting procedures. It works best if you are using a scaled pattern that has been created on a grid (think graph paper), where you can see the square lines and the squares correspond to 1 inch. This grid usually indicates the grain line for cutting as well, so it can be very informative to your process.

You'll need: paper, pencil, ruler (see-through rulers are great), yardstick for long lines, curved ruler (optional).

Use either a grid-type paper (like the back of some wrapping papers) or the Pellon-type of interfacing that is pre-gridded with either lines or inch-square dots (the interfacing works, but it's not dirt cheap and it can stretch out if you use the pattern a lot). You can also make your own gridded paper on newsprint or craft paper by drawing out 1-inch grid lines. If you draw your own grid, be very careful to be accurate.

Then just transfer the outline of the pattern from the mini-pattern piece to the larger grid, using dots at intervals along the lines to corresponding points in the grids, and connect the dots with lines to match the mini-pattern piece. Easy.

Or try starting at one corner and work your way around the pattern outline by counting the squares of the mini-pattern, and then counting the large squares of your full-size grid, placing corresponding dots and connecting dots as you finish a seam line. Or connect the dots when you are done marking the whole piece (like a connect-the-dots game). In the same way, you can transfer other important information, like grain lines, trim lines, and notches, by comparing the mini-pattern and your larger layout, and placing them along the corresponding squares.

Carrie Jo has many degrees, culminating in Theatre Design, so she knows a thing or two about sewing and patterning. And teaching. Originally from the big city in Minnesota, she now teaches costume technology to college students here in Moscow, Idaho. One of her real passions is clothing and costumes that actually *fit* people. Another is to knit voraciously, and do it without stitching pieces together afterwards.