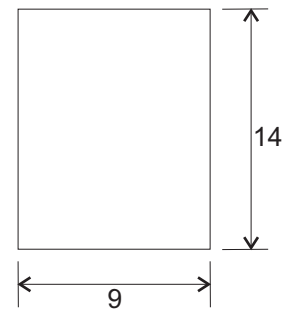
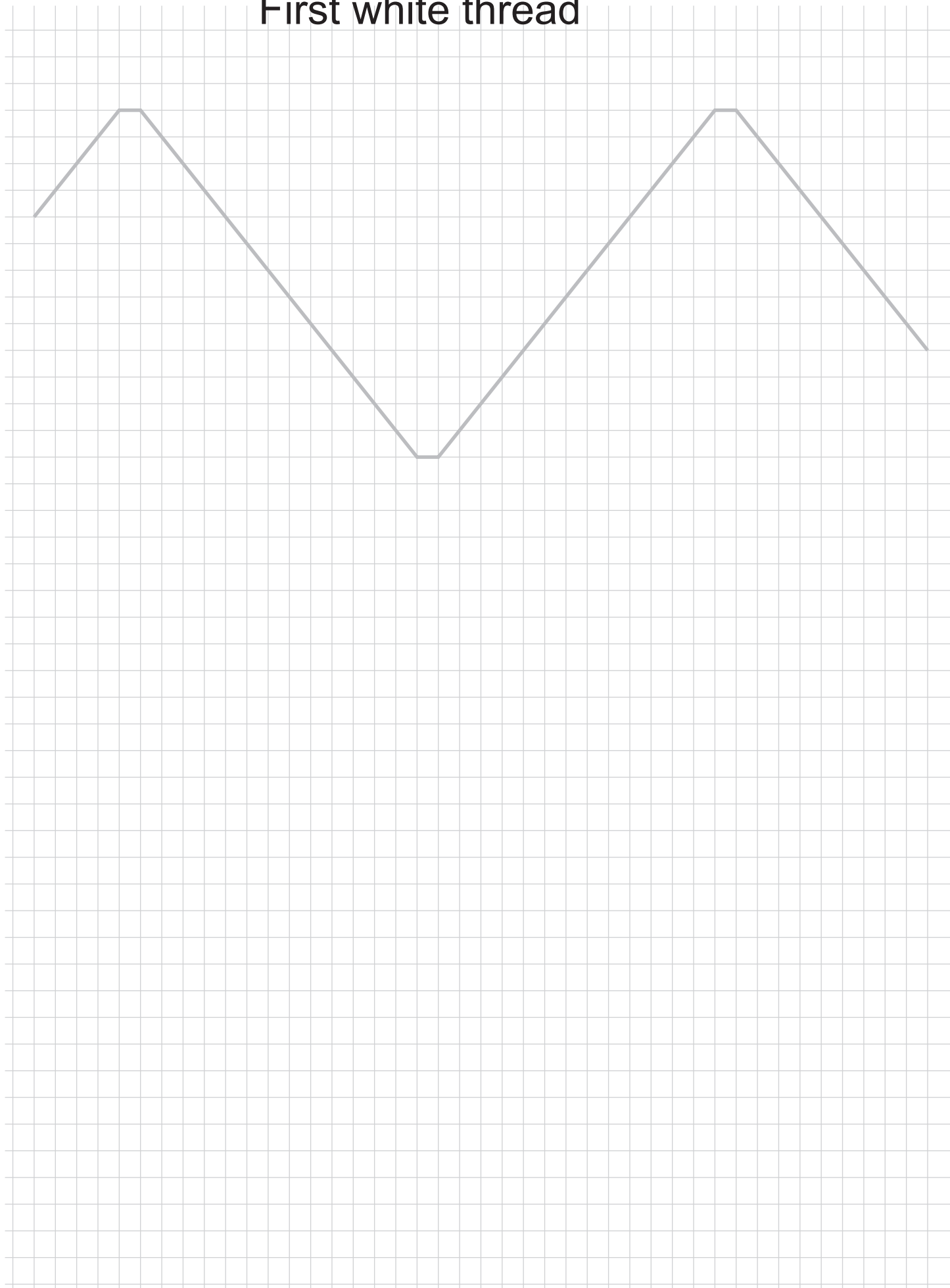


The background weave ratio is not square. The threads are closer from side to side than up and down. Distance between horizontal threads is  $9/14$  the distance between vertical threads.

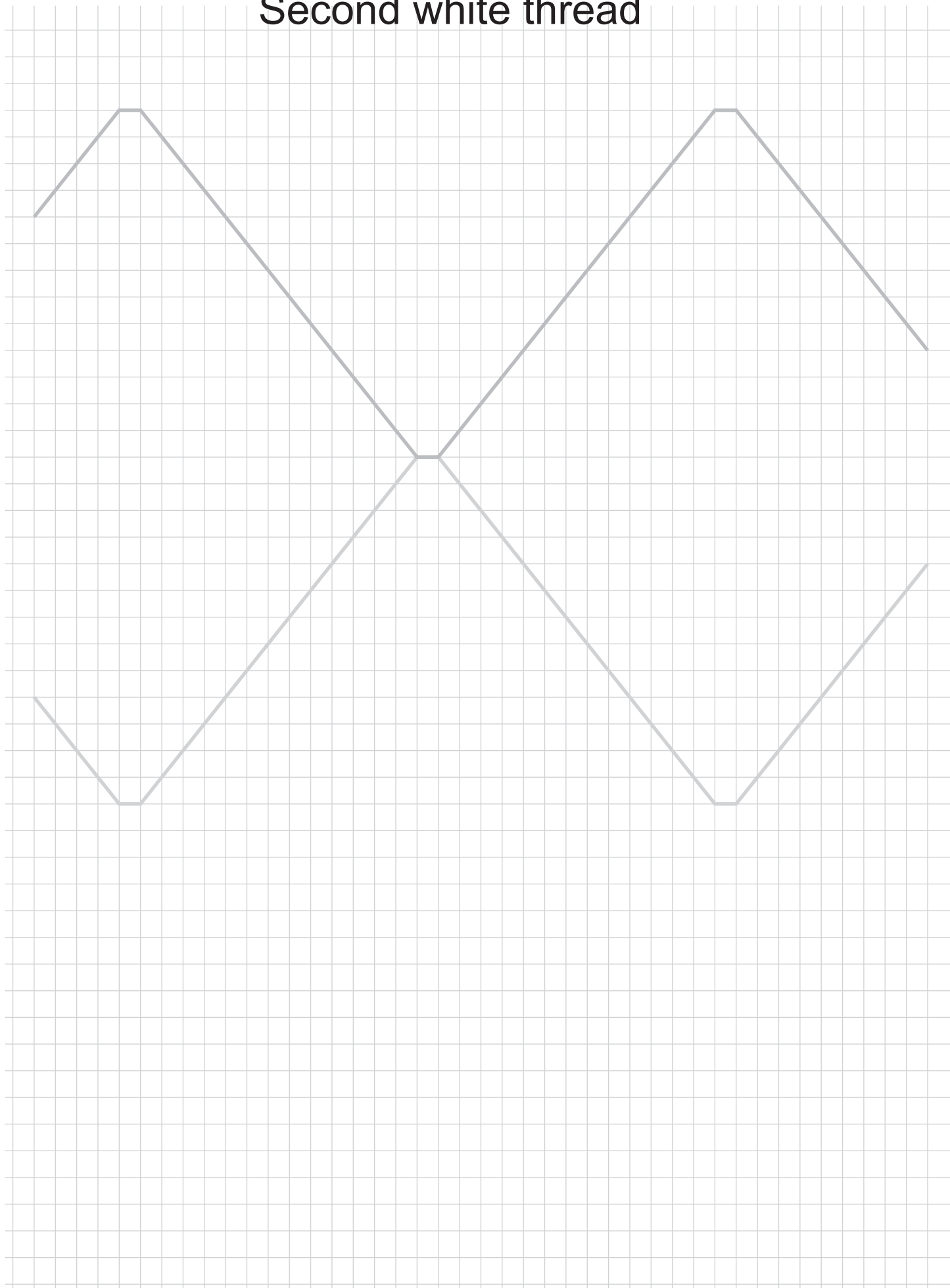
Colored threads lie on the front of the horizontal threads, but pass between the horizontal threads and vertical threads at each intersection.



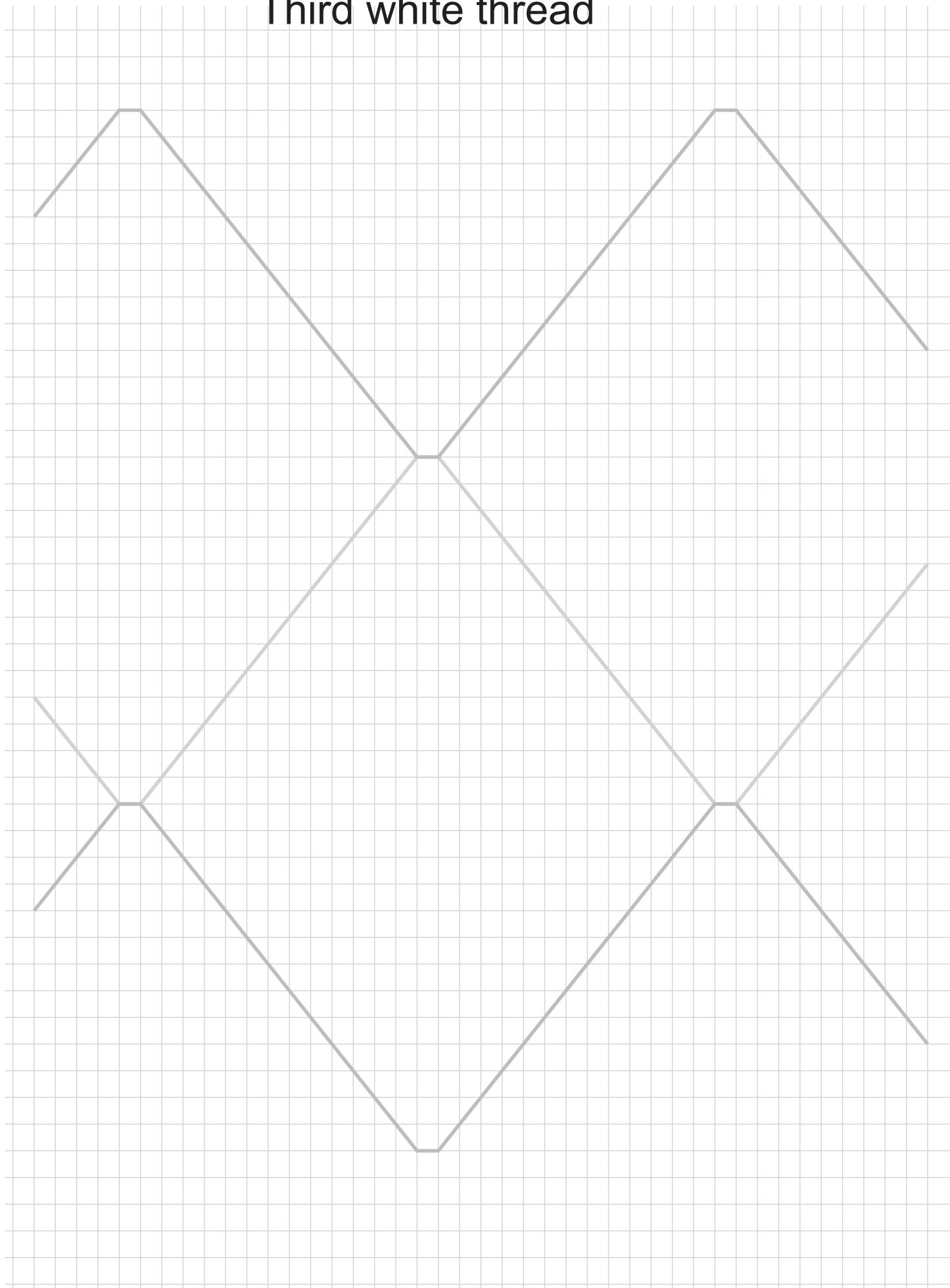
# First white thread



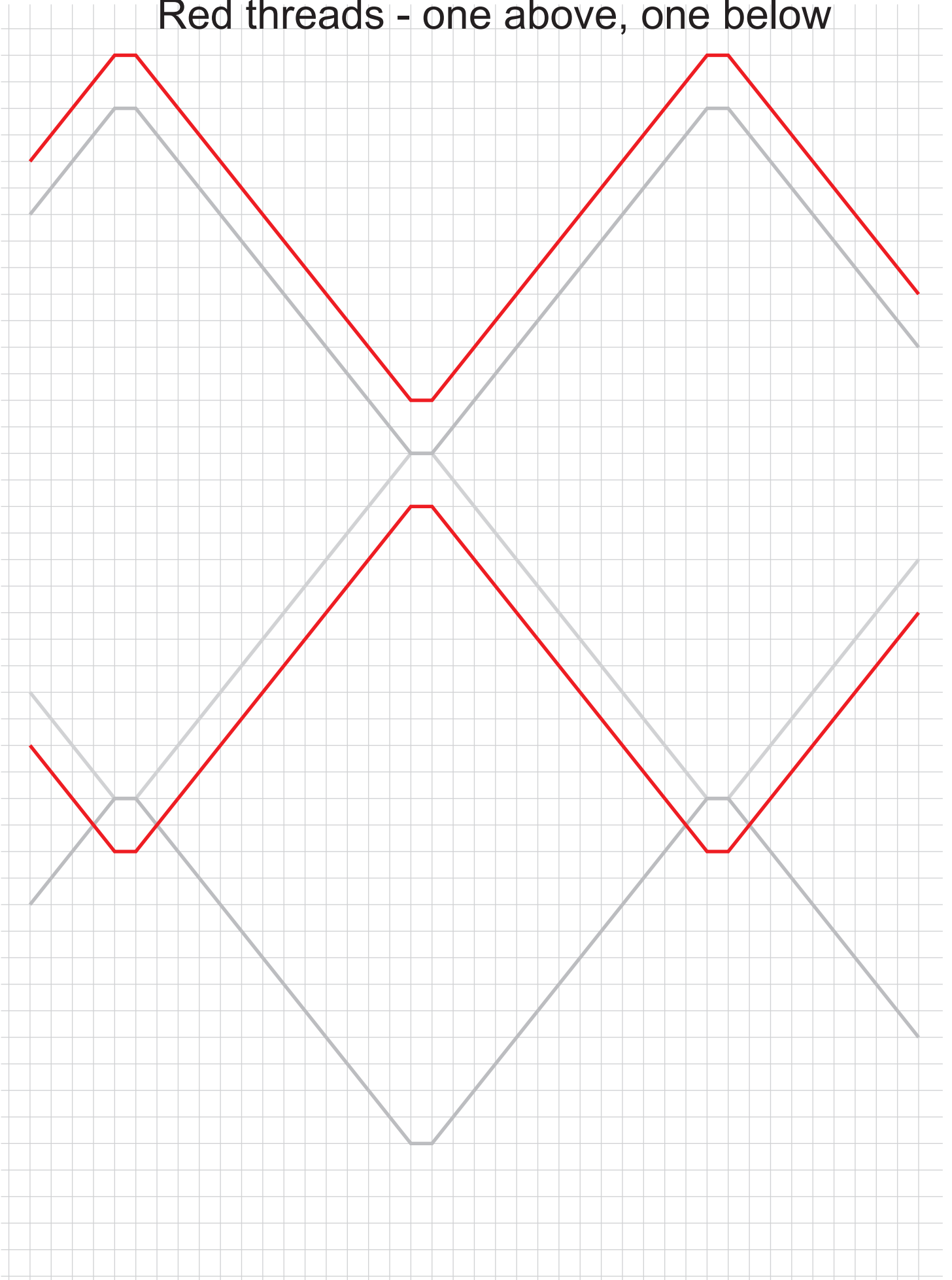
# Second white thread



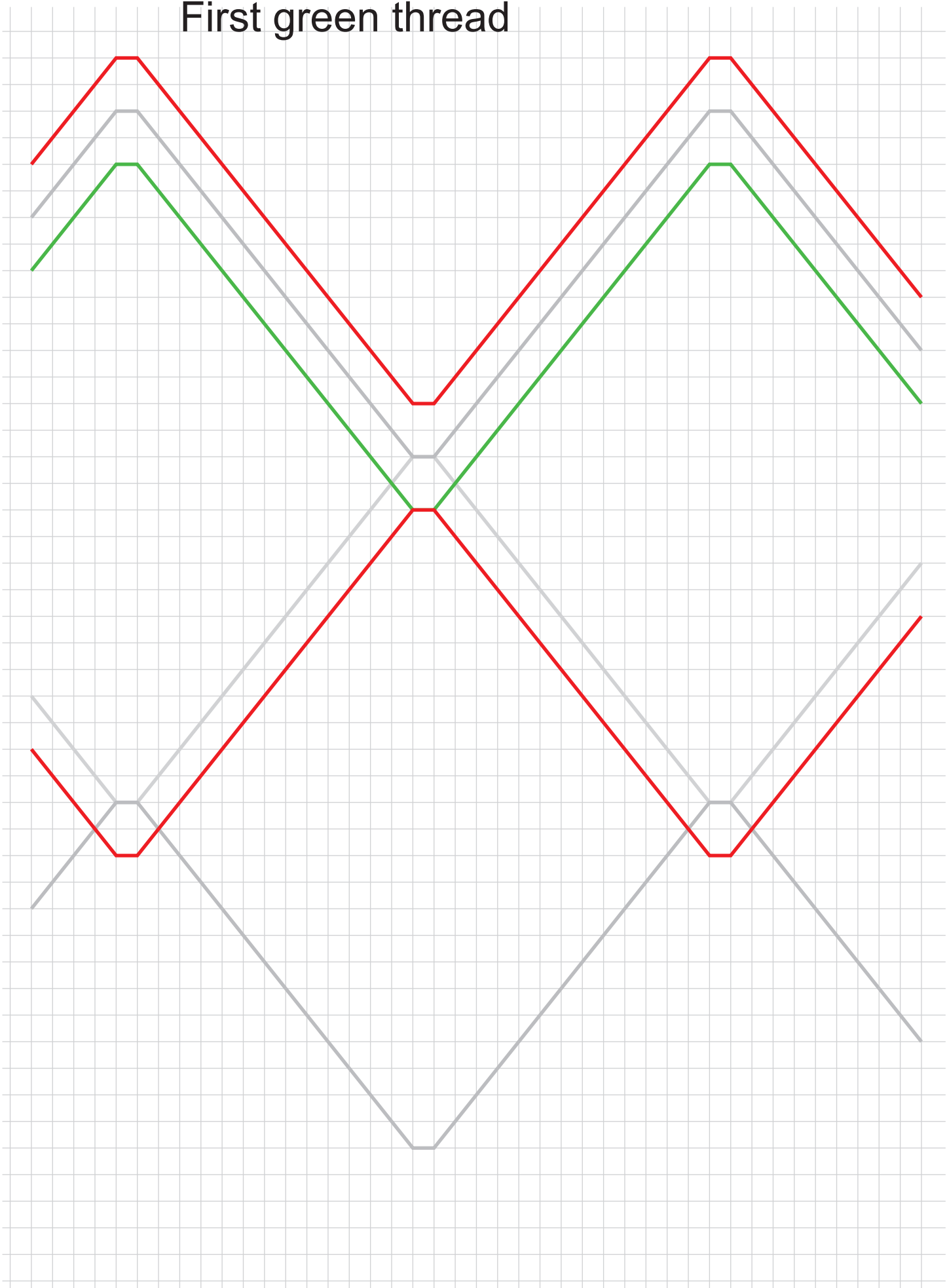
# Third white thread



# Red threads - one above, one below

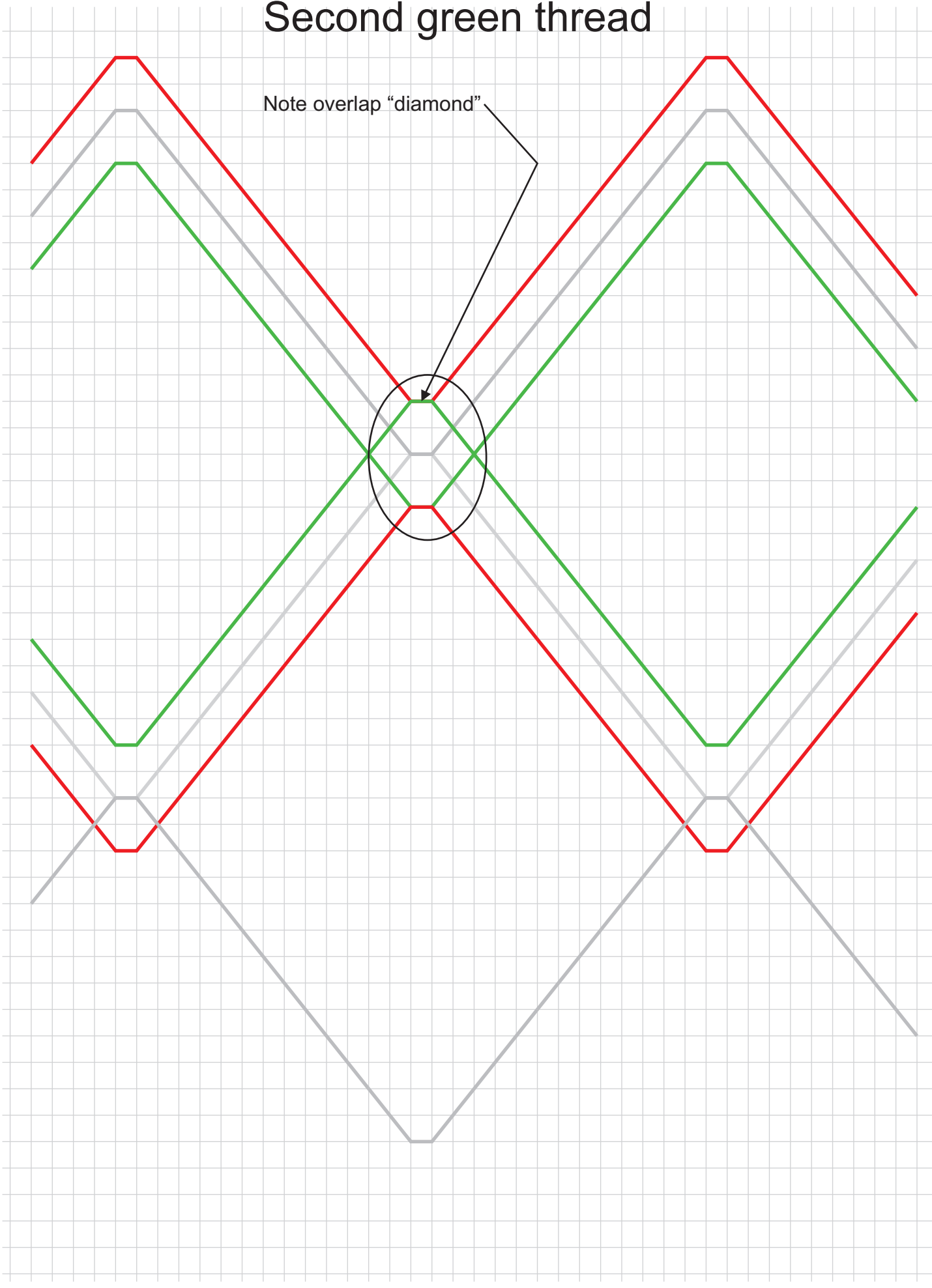
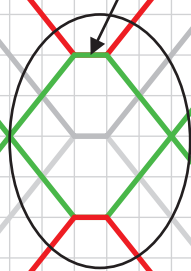


# First green thread

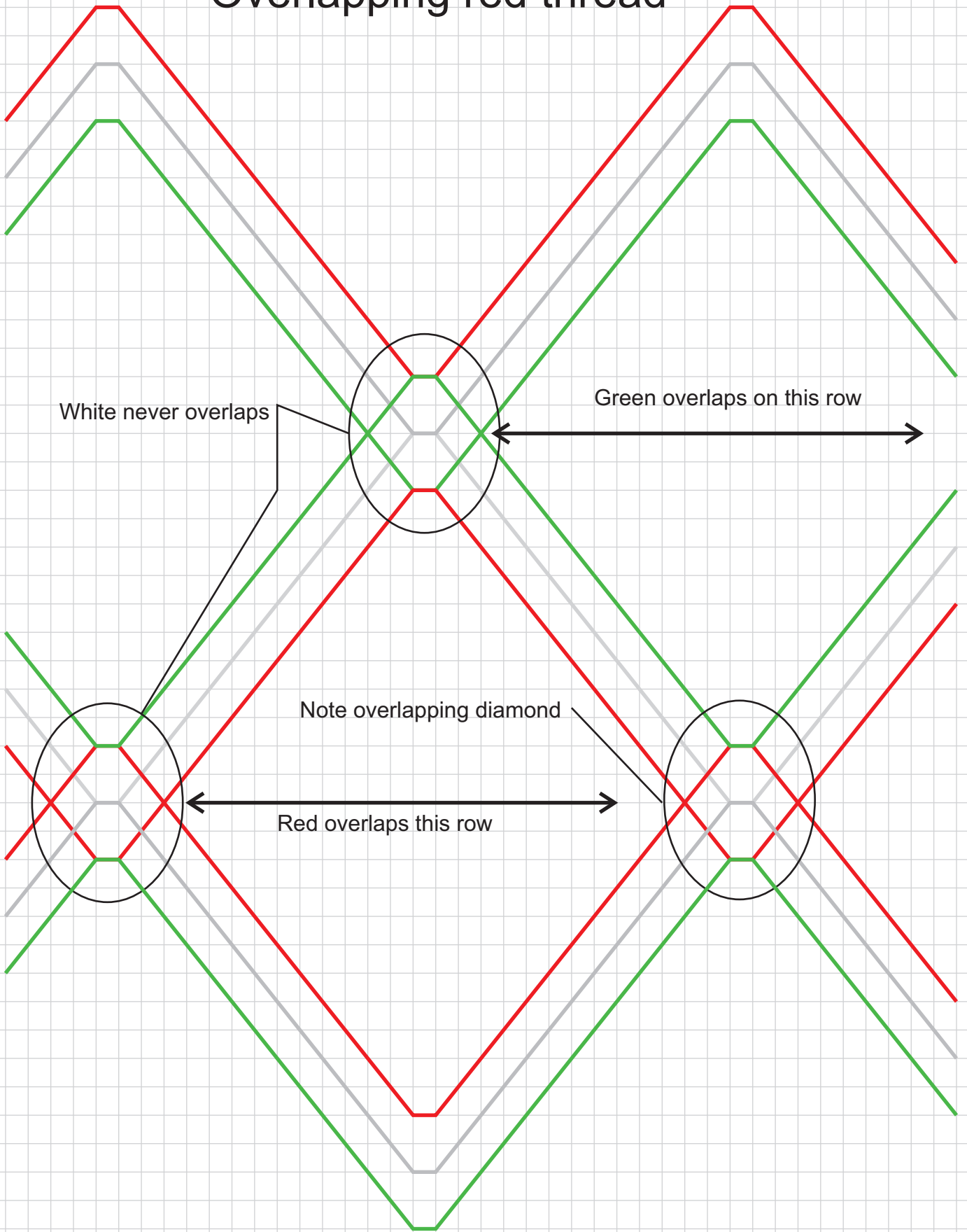


# Second green thread

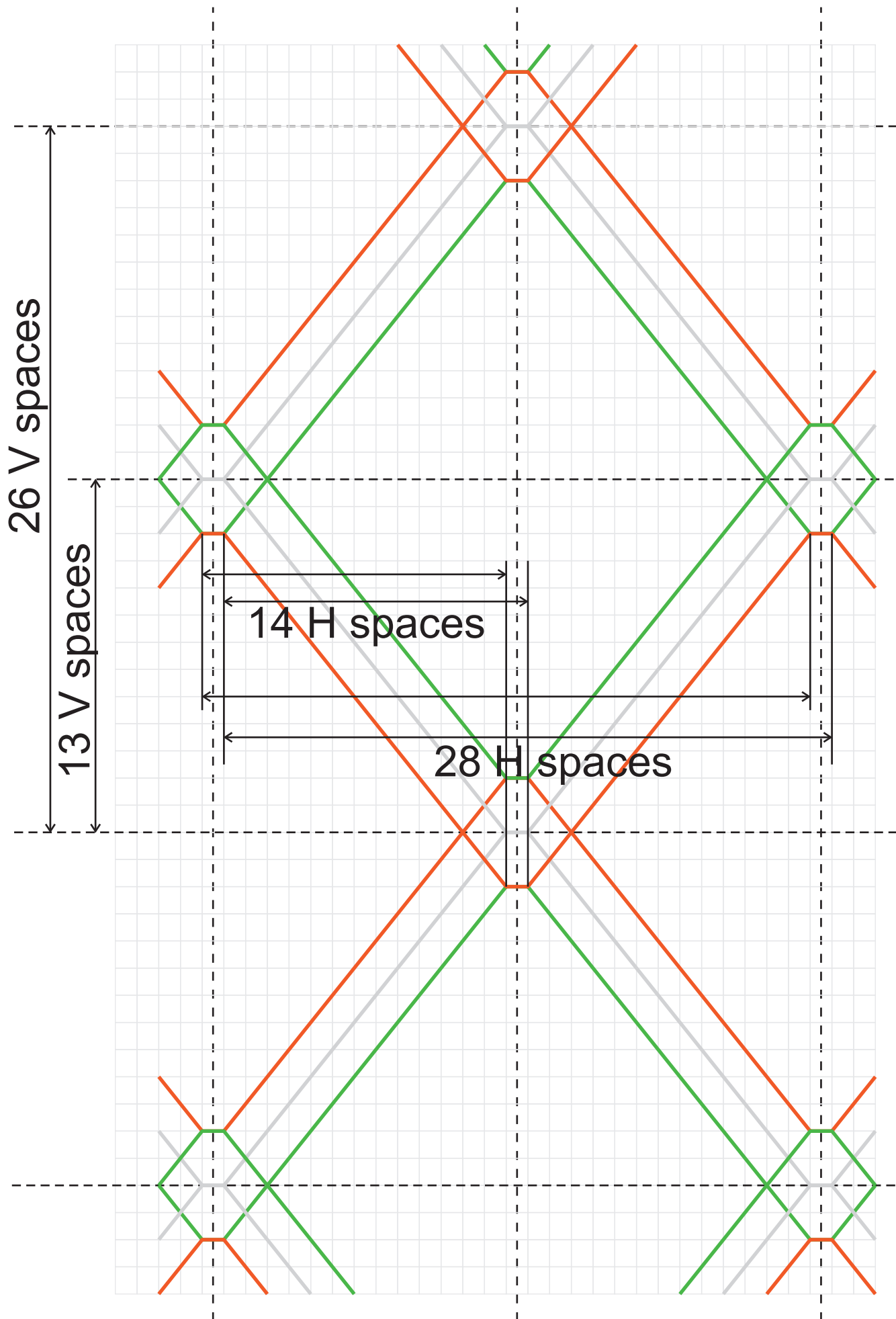
Note overlap "diamond"



# Overlapping red thread







# Faking It

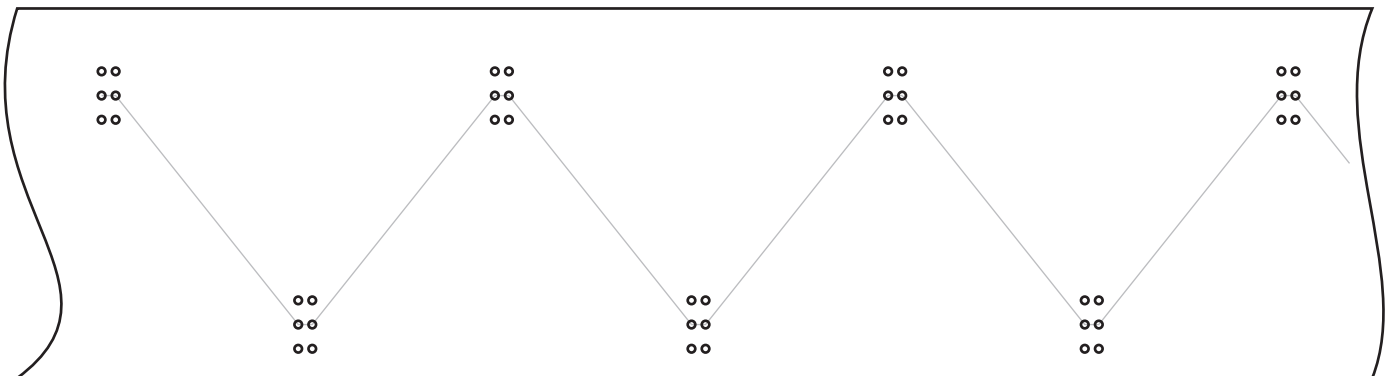
First of all: You can't, not really. The backing weave is critical to getting it exactly right on close inspection, and that's effectively beyond anything except a programmed loom or a skilled hand weaver.

But you may be able to imitate it so that it looks OK from a distance. Doing that requires getting a backing weave/grille that is OK-ish and an acceptable color. This is much easier for black background than for copper/oxblood.

Once you have a backing weave, get set up to embroider it. This is going to be a large embroidery project. The rolling embroidery frame I described in another document would work. There are other ways, including variations which amount to a small quilting frame.

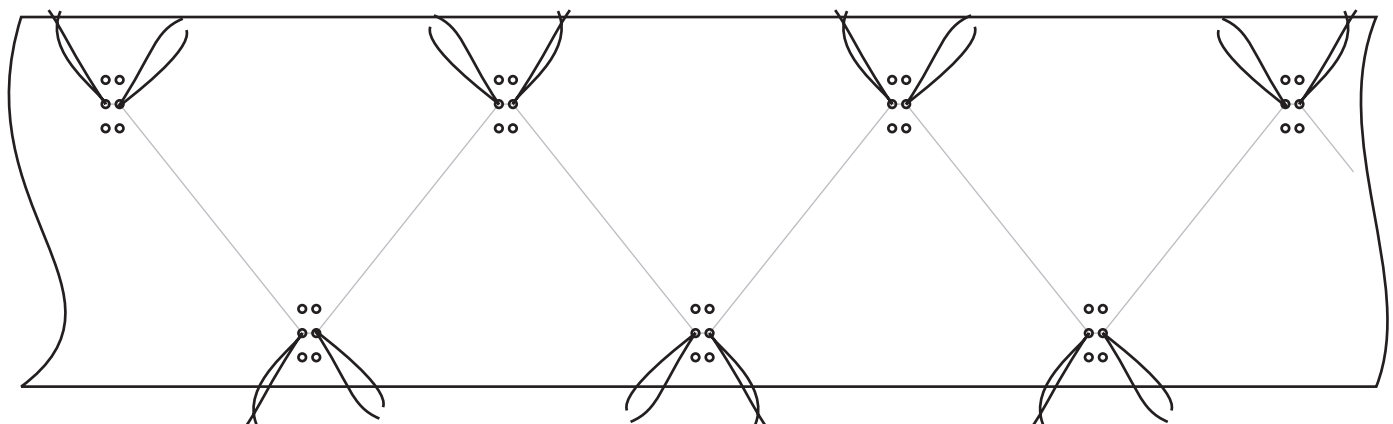
Then, make a pattern template so you have some chance of the stuff coming out regular and not depending on the weave underneath. The backing weave is most unlikely to have the correct spacing and ratios of threads to make it usable as a guide for the pattern.

The pattern template is a piece of plexiglass with holes drilled in it corresponding to the places where the horizontal and vertical points of the diamond pattern sit. As shown below:

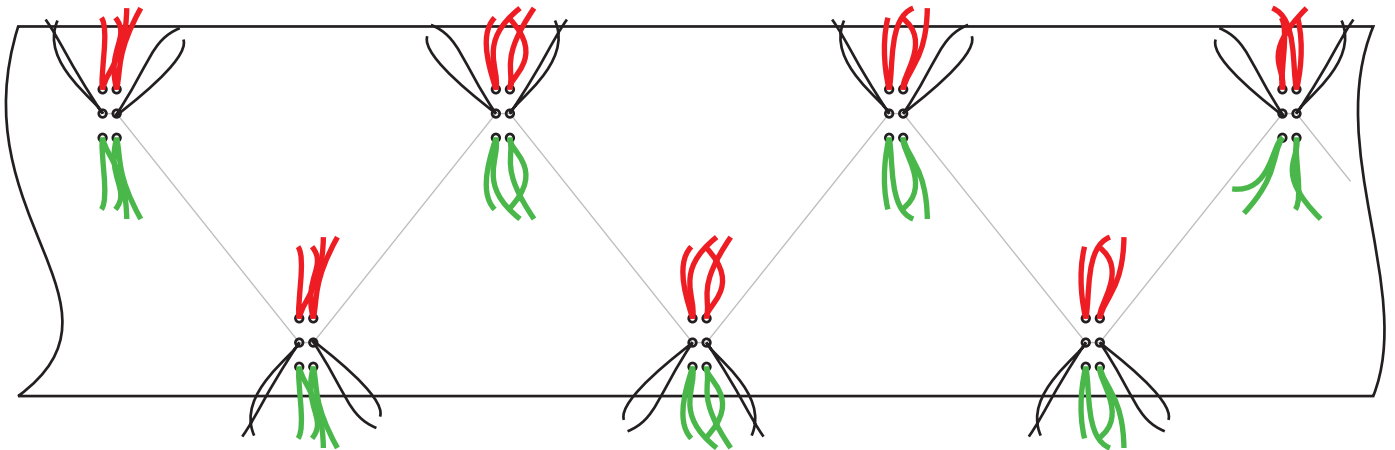


There is a set of six holes at each point of a half-diamond. Make the holes big enough to pass an embroidery needle and thread. It's probably best to make the pattern wide enough to completely cross a 30" width of backing weave so as to keep the pattern straight all the way across.

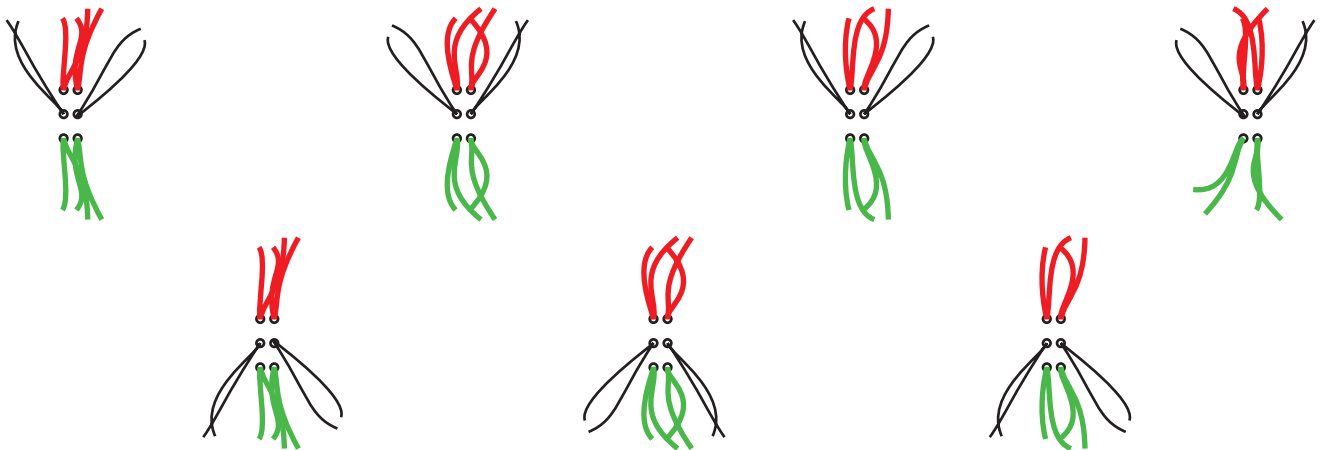
To use this, set up your frame and backing weave, get the weave threads as straight up and down as possible, then align the pattern accurately across the width of the weave. Take some stitches on each end to hold the pattern to the weave so it won't move. Then put a loop of white thread through each pair of center holes, and through the backing weave as below:



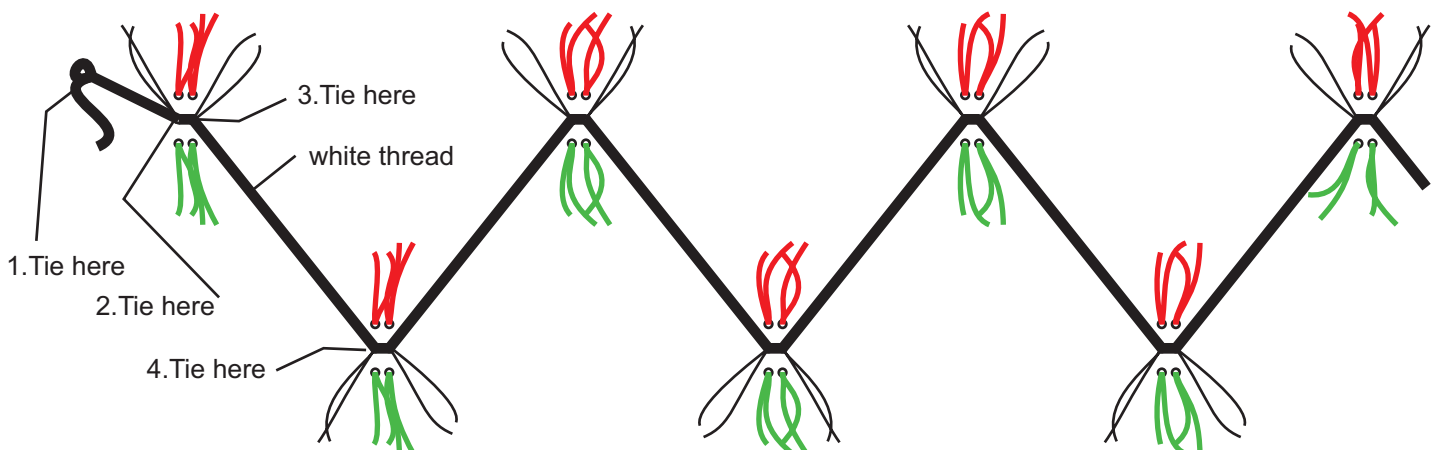
Once you've done that, repeat with red thread above the white, and green below the white. Notice that I've substituted black lines for white thread since white lines don't show up on a white background.



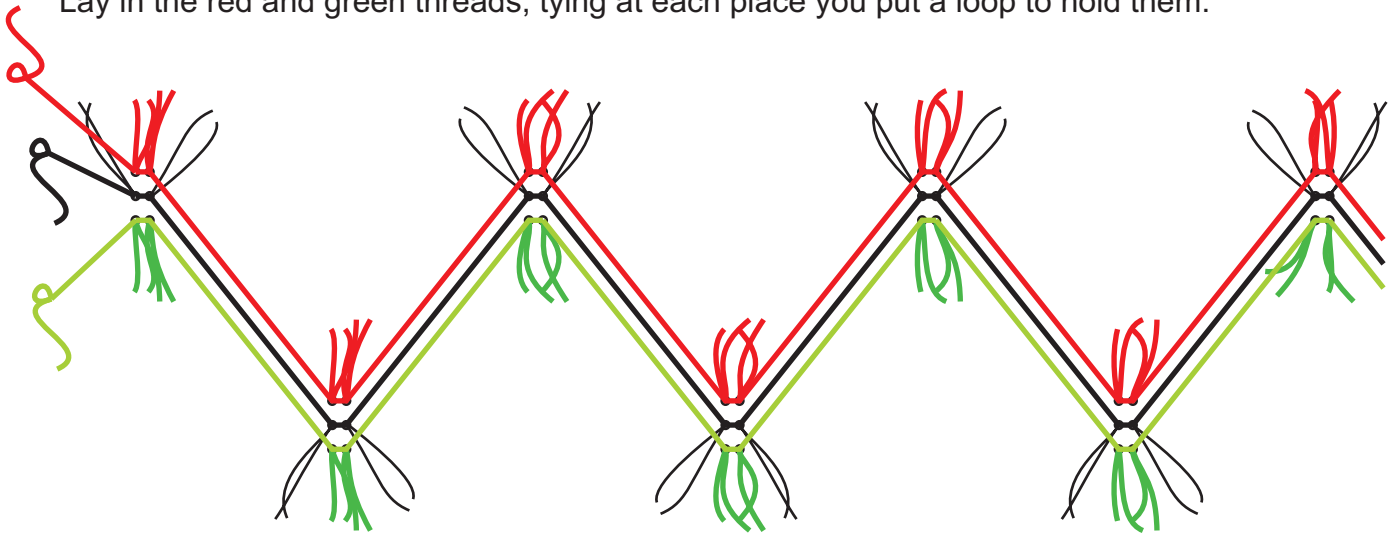
Remove the stitches you used first to hold the pattern to the backing weave, and carefully (!!) lift the pattern, leaving the open loops of colored thread you have put in at the pattern points.



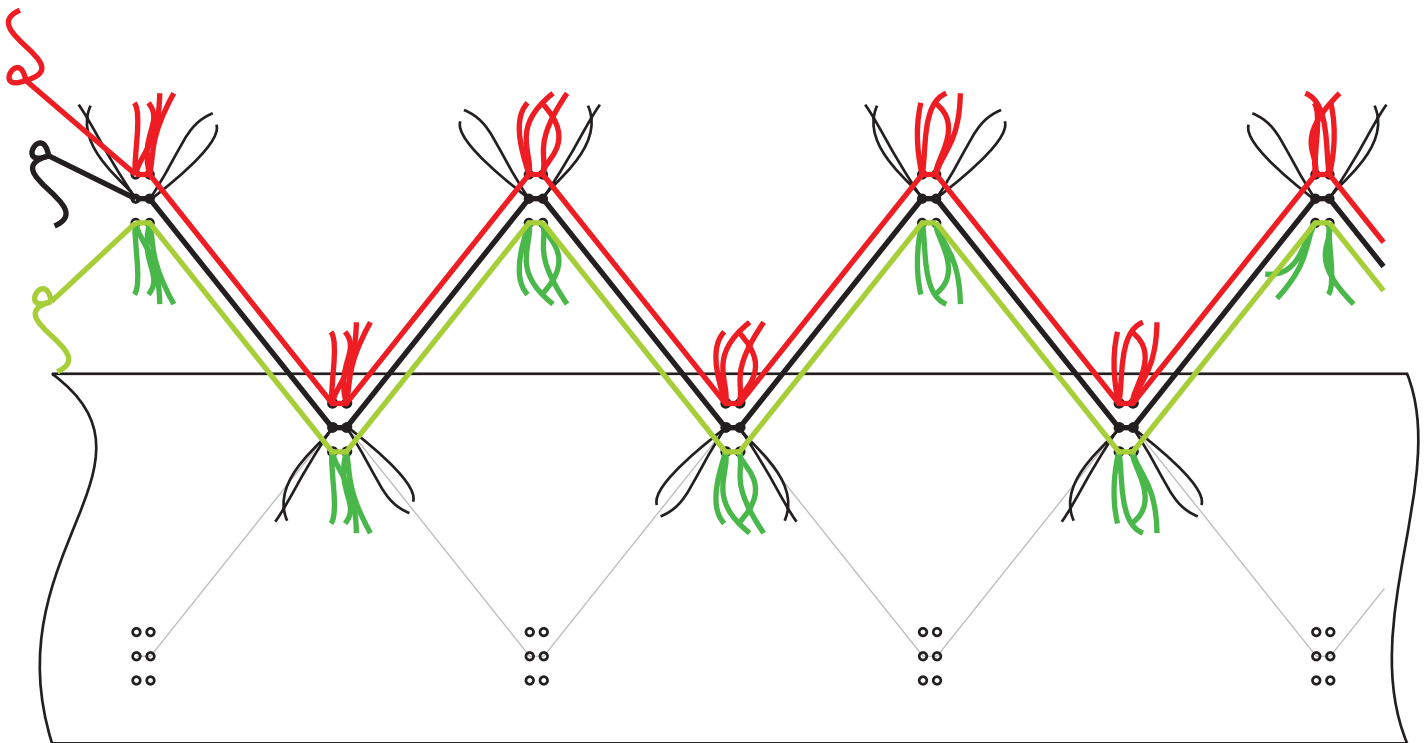
1. Take white embroidery floss and pass it through the backing weave anywhere near the first tie-down thread location, tying a simple knot in the white thread that you can remove later.
2. Pass the white thread between the first pair of white threads through the backing. Tie a simple overhand knot to hold it in place there.
3. Pass the white thread through all the remaining white-thread tie-downs in sequence, tying a knot at each one. Make the white thread just tight enough to lie straight, not stretched.



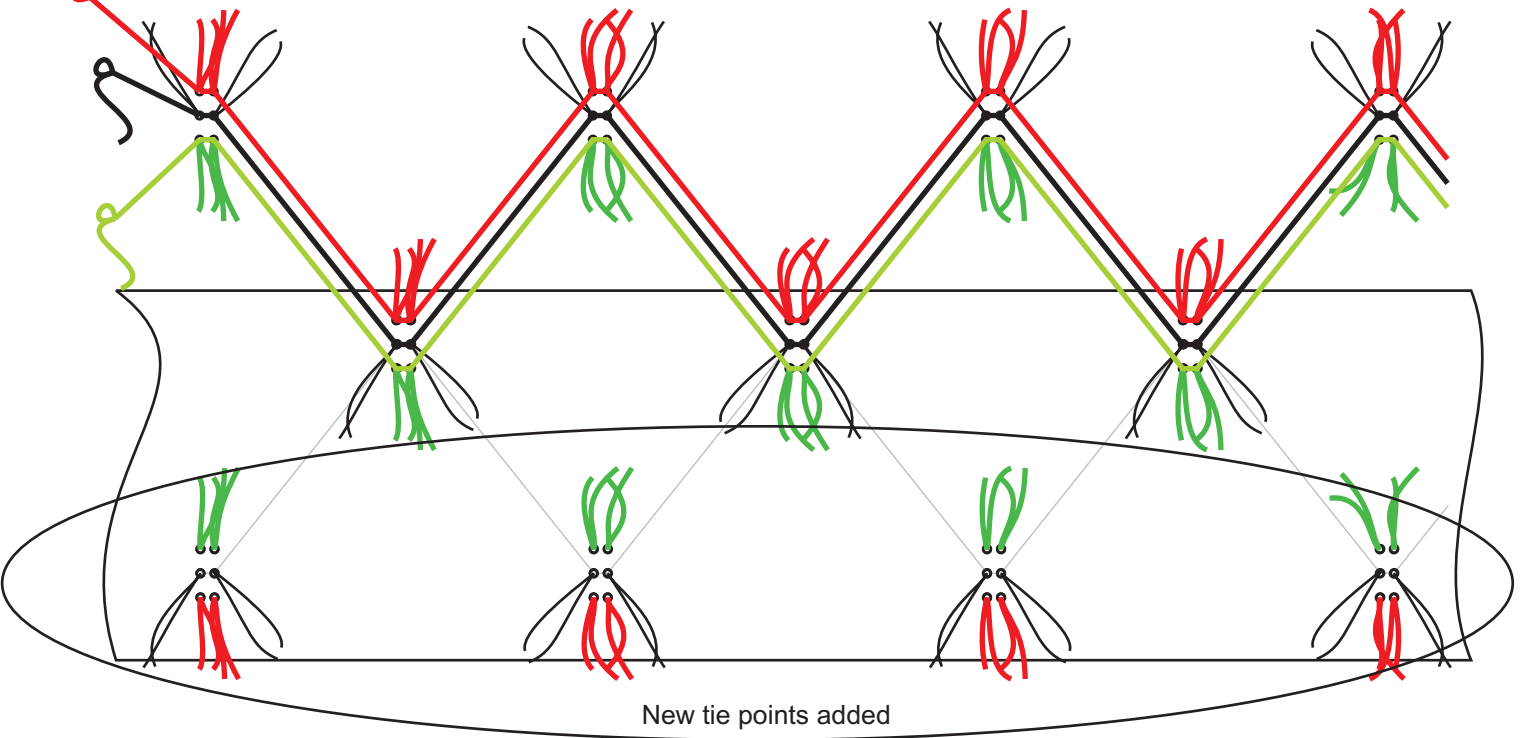
Lay in the red and green threads, tying at each place you put a loop to hold them.



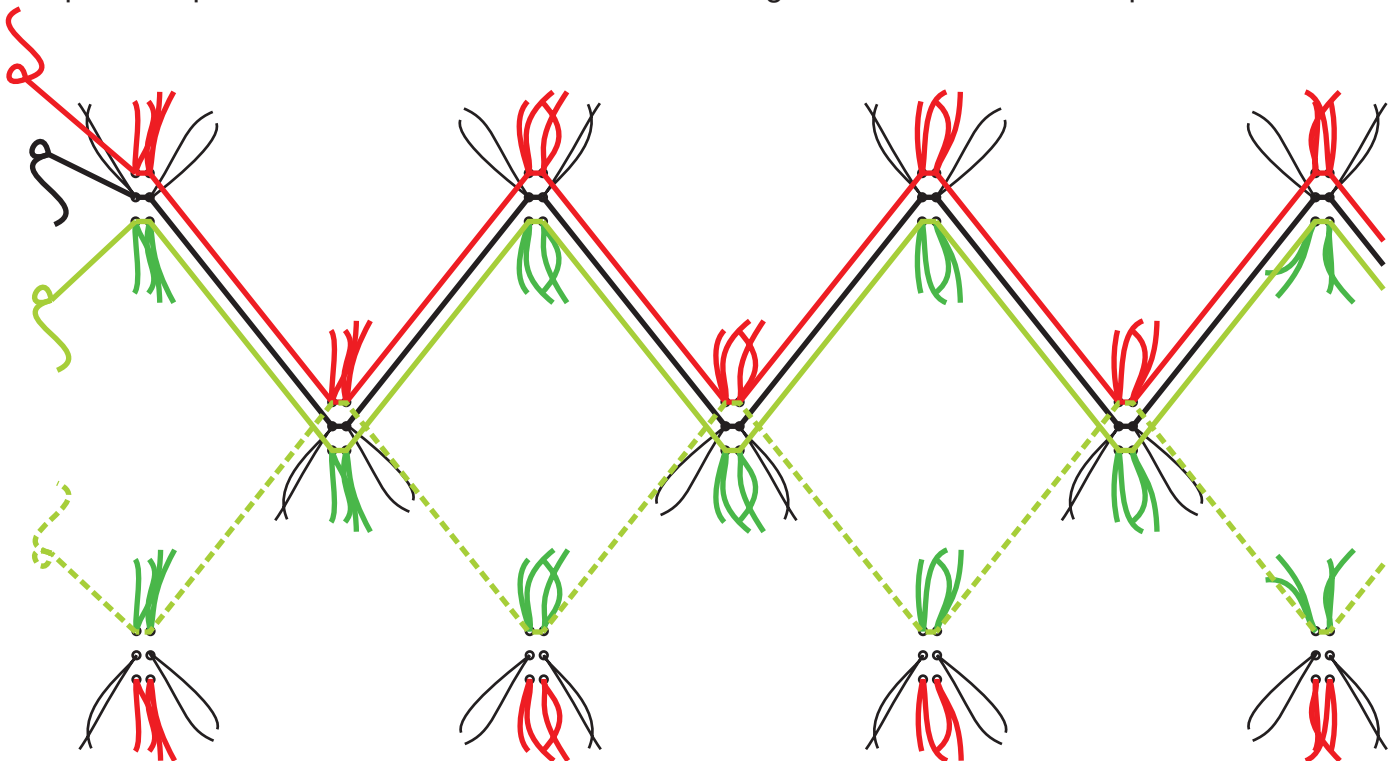
Place the plexiglass pattern back on the backing weave, flipping it over vertically. Take a second loop of white thread every few diamond-points in the "white-thread" locations to hold it in registration with the previous white thread zigzag. The previous lower red and green loops will be used again for this run.



Place new row of tie points across the bottom of the pattern. Only the bottom row is needed because the top row will be re-used.

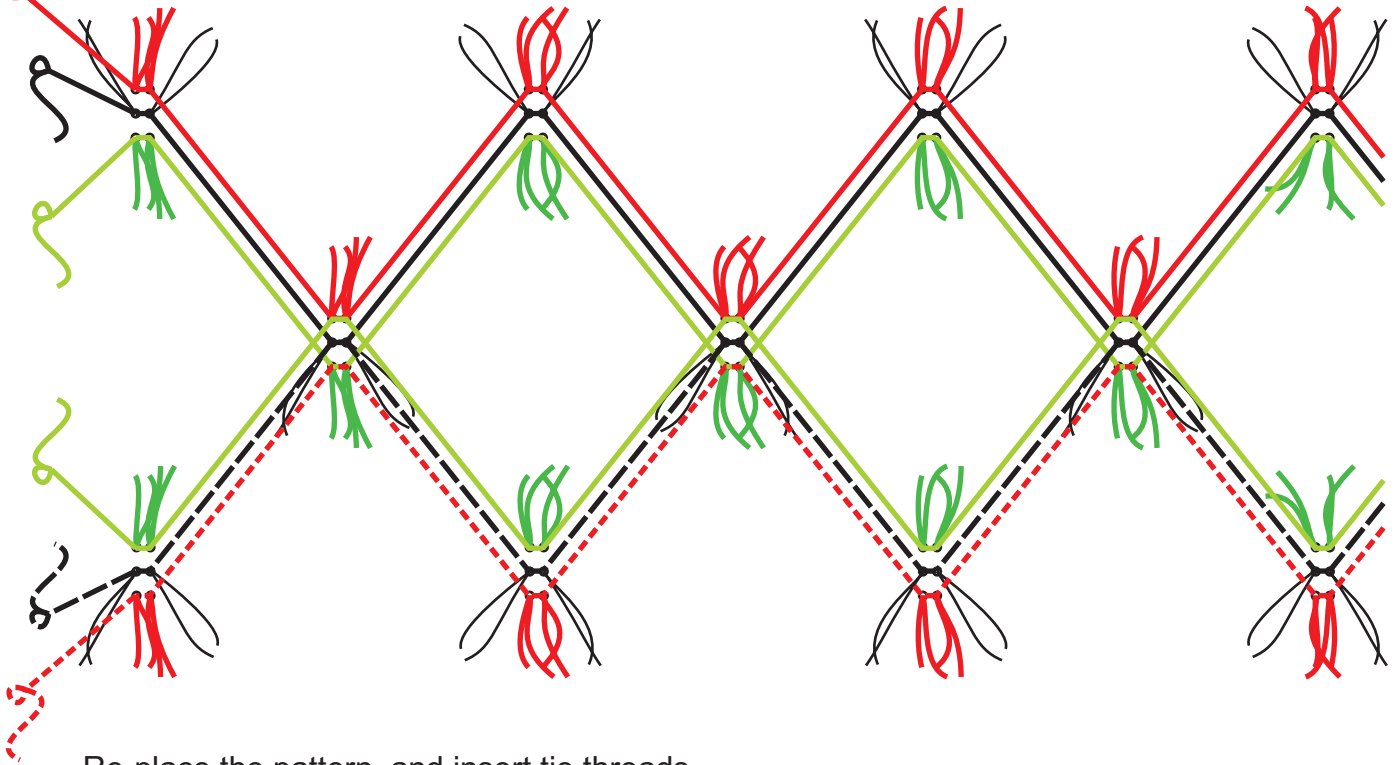


As before, remove the pattern tie-down stitches and carefully remove the pattern, leaving the new tie points in place on the bottom row. Notice that the green tie-downs are on top for this row.



Place the green thread, using the green tie down for the bottom row and the **red** tie down in the previous row. New green thread shown in dotted line.

After the green thread, place the white thread (shown as black here, for contrast!) and the red thread. Both new ones shown dotted.

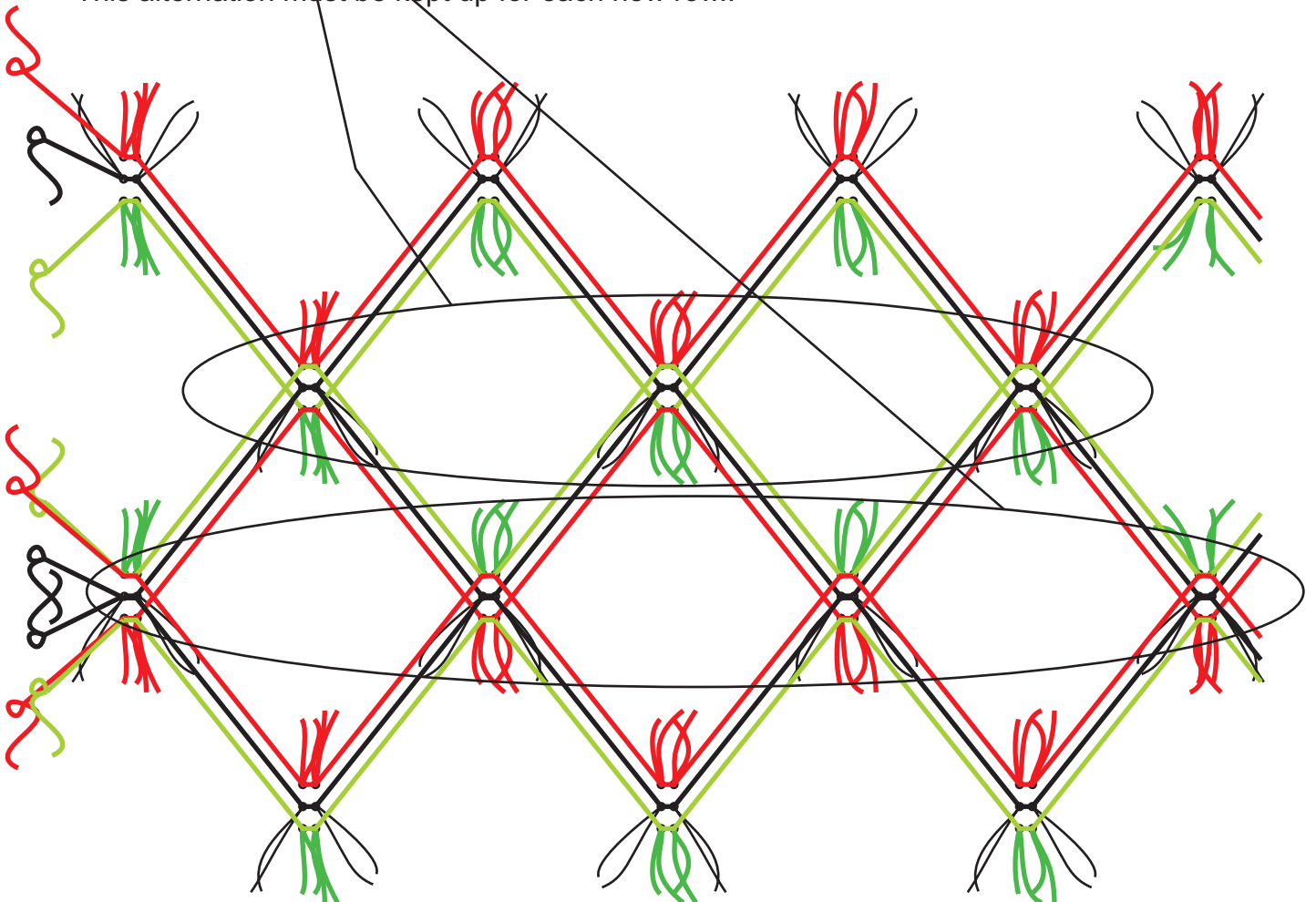


Re-place the pattern, and insert tie threads.

Notice that here: the green threads overlap in the middle of the diamonds.

And notice that here: the RED threads overlap in the middle of the diamonds.

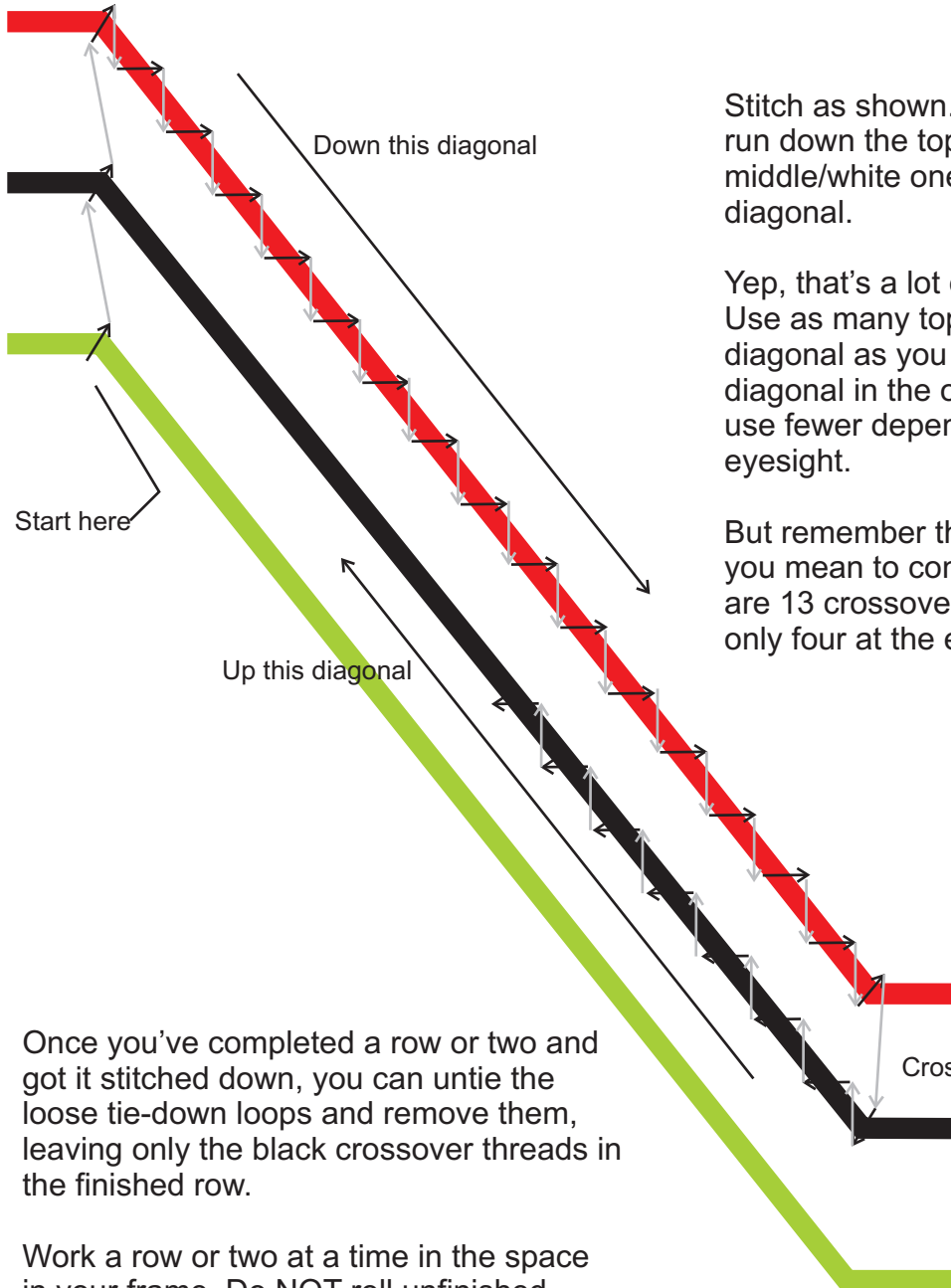
This alternation must be kept up for each new row..



When you've done a row or two, sew the color threads onto the backing. The color threads are just lying on top of the backing, held at the corners by the tie-threads. You have to sew them down.

Use very fine black thread and stitch the color thread down. The black thread is shown as black on top of the weave/color threads and gray underneath the backing.

Stitch down one set of corners as shown. Then run down the top diagonal to the next corner.



Stitch as shown. Tie down the corners, then run down the top diagonal, up the middle/white one, and back down the lower diagonal.

Yep, that's a lot of stitches. You can cheat. Use as many top-side tie-downs per diagonal as you can. There are 13 per diagonal in the original. You may want to use fewer depending on your patience and eyesight.

But remember that for consistency, start as you mean to continue. It'll look funny if there are 13 crossovers of black at the start and only four at the end. 8-)

Once you've completed a row or two and got it stitched down, you can untie the loose tie-down loops and remove them, leaving only the black crossover threads in the finished row.

Work a row or two at a time in the space in your frame. Do NOT roll unfinished rows onto the take-up roll and plan to come back to them later. The colored thread will move around. Run a row across, perhaps two, then use the black tie-down embroidery from this page to hold them. Only roll finished rows out of the active working area of the frame.