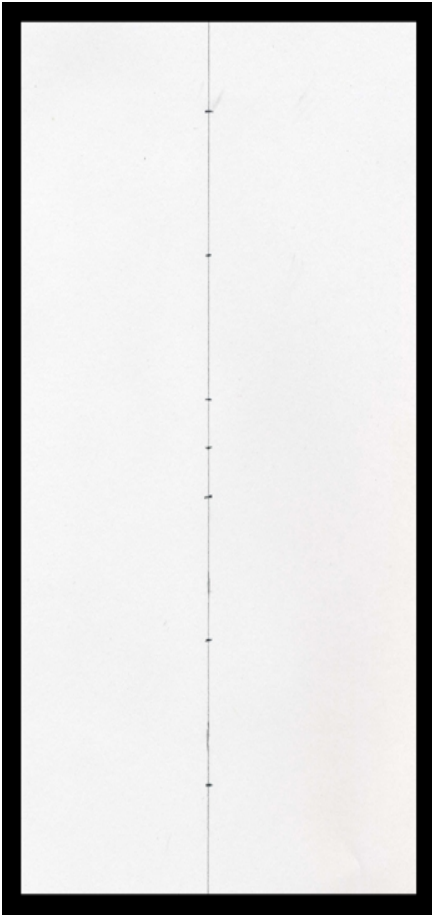
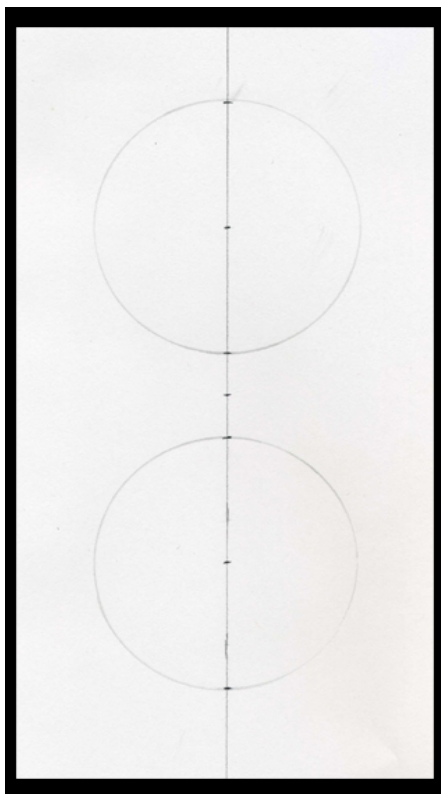


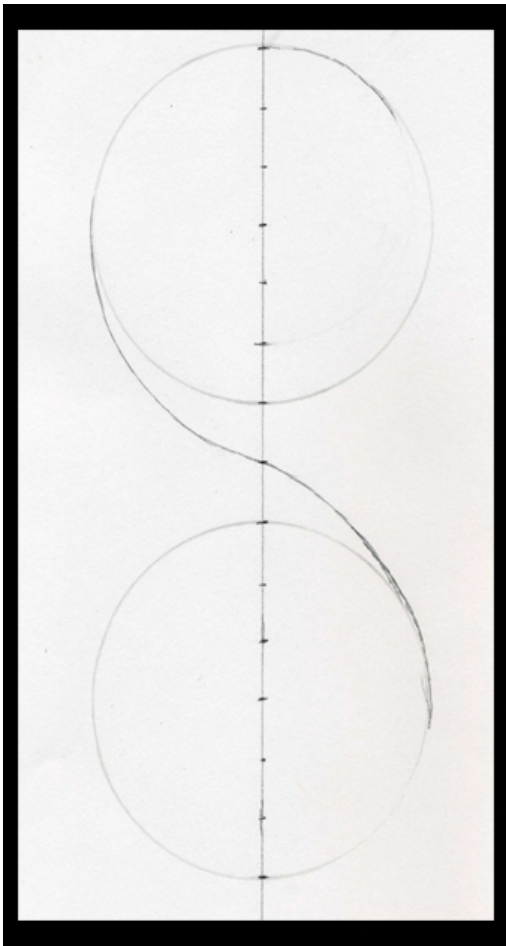
CELTIC SPIRALS



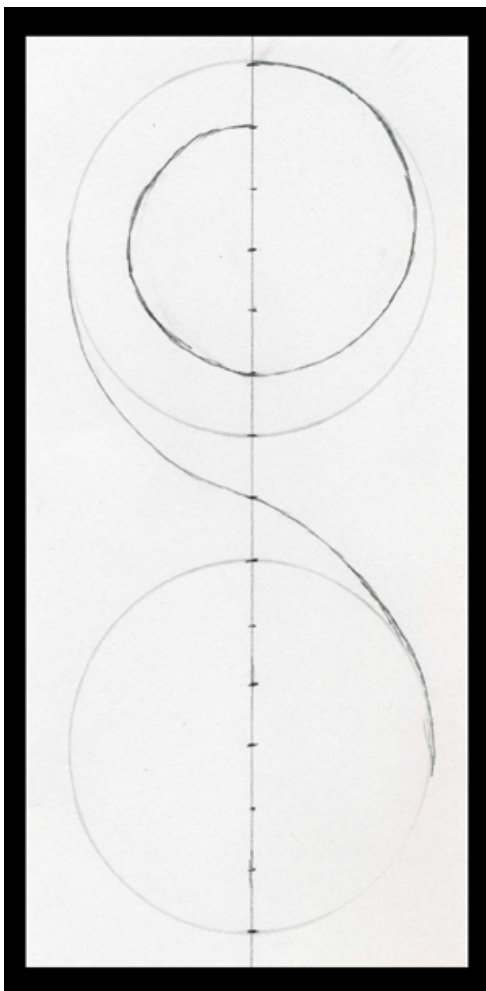
Use your ruler & divide your sketch paper in half with a midline. You're going to need 7" overall for this, so close to the middle of your line (doesn't need to be exact), make a tic mark. Now measure up 1/2" & make another tic mark. From that 2nd tic mark, measure another 1 1/2". And one more tic mark 1 1/2" past your last one. Now go back to the first tic mark and make tic marks at the same places going down your midline.



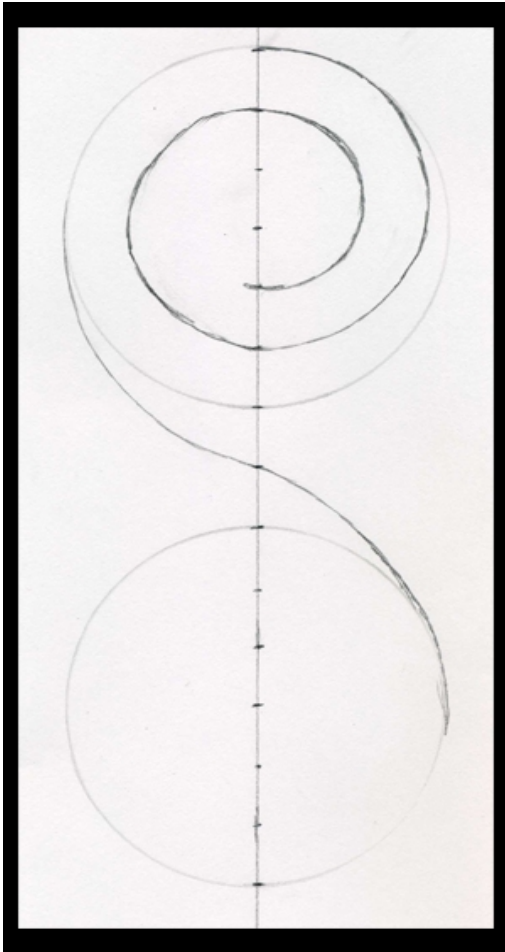
So measuring from your first tic mark along the midline with your ruler, you've got a tic mark at 0, 1 1/2, 3, 3 1/2, 4, 5 1/2, & 7 inches. With your compass, set the point at the 1 1/2 mark. Draw a circle 3" in diameter. Now, down at the 5 1/2 mark, draw another 3" circle.



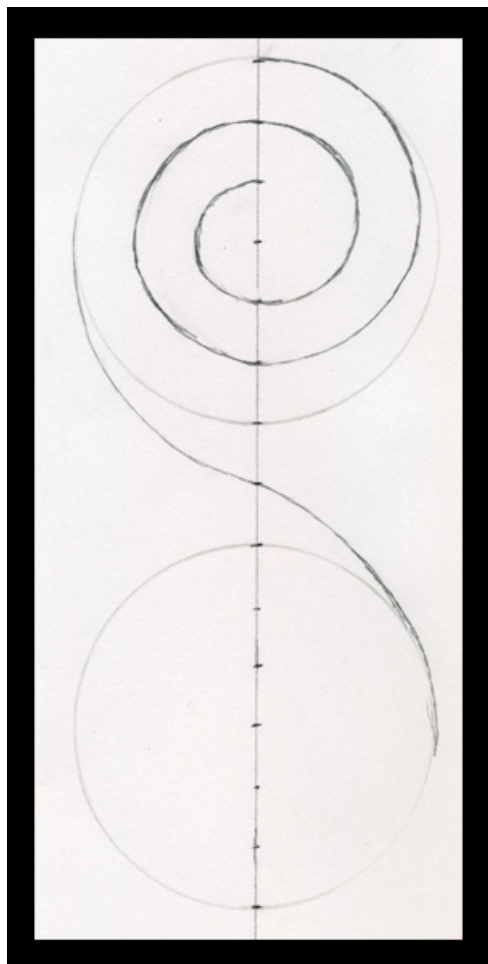
Next, if we think of the 1st circle like a clock face, draw in a curved line (don't bother with the compass, just use your judgement) from 9 o'clock to the tic mark between the two circles. Then draw another from the tic mark to 3 o'clock on the 2nd circle. This is your guide for the "S" curve. And because I forgot to scan between these steps, take your ruler and make tic marks every 1/2 inch inside of the circles. These will be the guides for drawing in the spiral itself.



Now draw in a curve from the midline at 12 o'clock on your top circle to the 1st tic mark inside of the circle down at 6 o'clock. Make it as smooth and half-circle like as you can. If you want to use the compass, go ahead, but I find I spend an awful lot of time trying to correct how curves meet when I use it for this stage. If you use the compass, your midpoint will be at 1 1/4, instead of at 1 1/2. And because I forgot to scan between steps, draw in another curve from the same tic mark at 6 o'clock up to the 1st tic mark inside of the circle at 12 o'clock. Once again, try to make it as much like a half-circle as you can, with about 1/2 inch (the space between our tic marks) between it and the outside line of the circle.

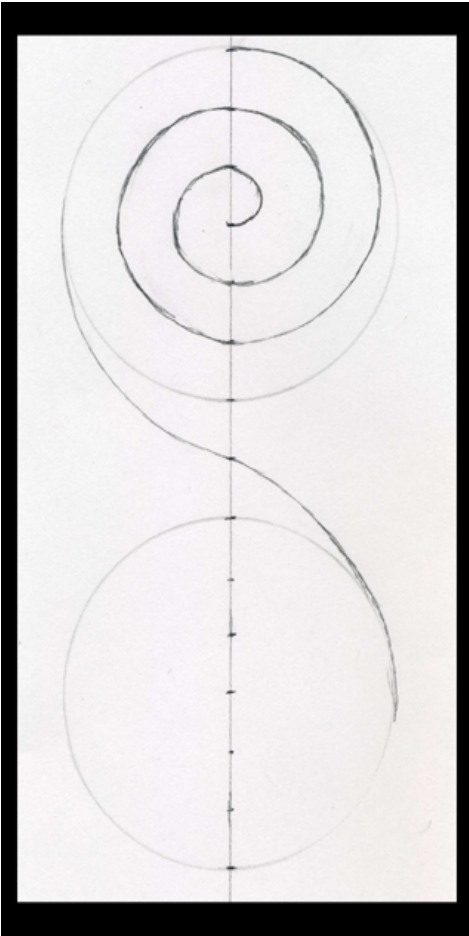


Guess what's next... Another curve from the 1st tic mark inside of the circle at 12 to the next available one down at 6 o'clock. Once again, try to make it as much like a half-circle as you can, with about 1/2 inch (the space between our tic marks) between it and the path you're drawing.

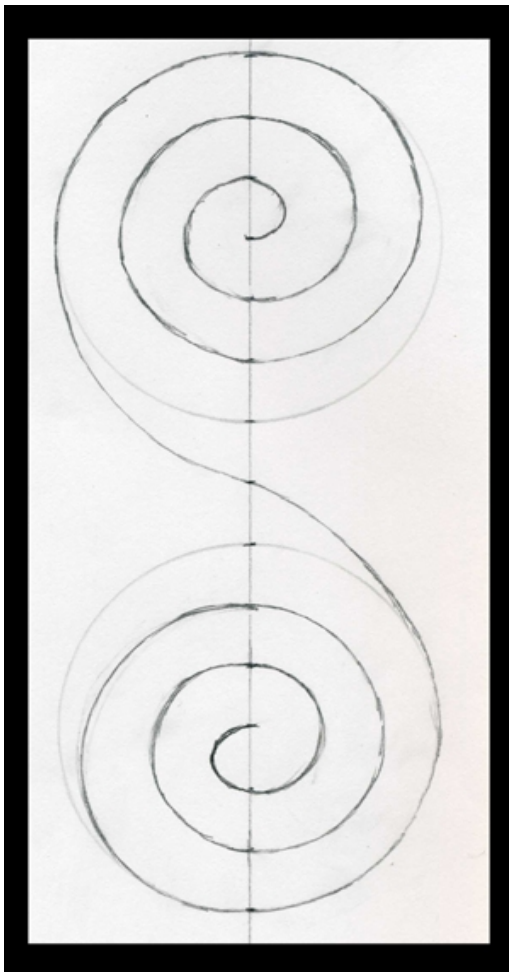


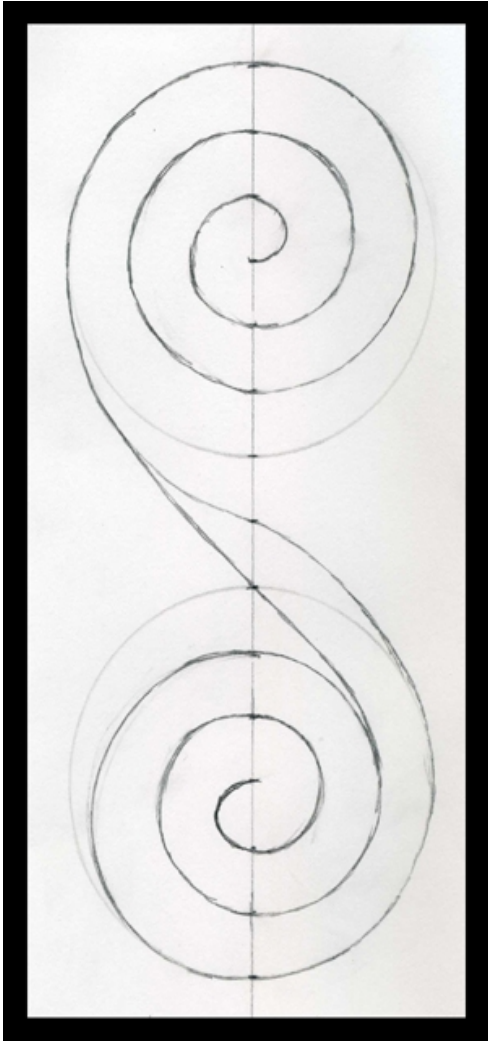
And one more time from the tic mark you just used up to the next available at 12 o'clock. Don't worry if it isn't perfect. That's what erasers and practice is for.

And lastly, one more curve from the tic mark you just used at 12 o'clock to your midpoint.

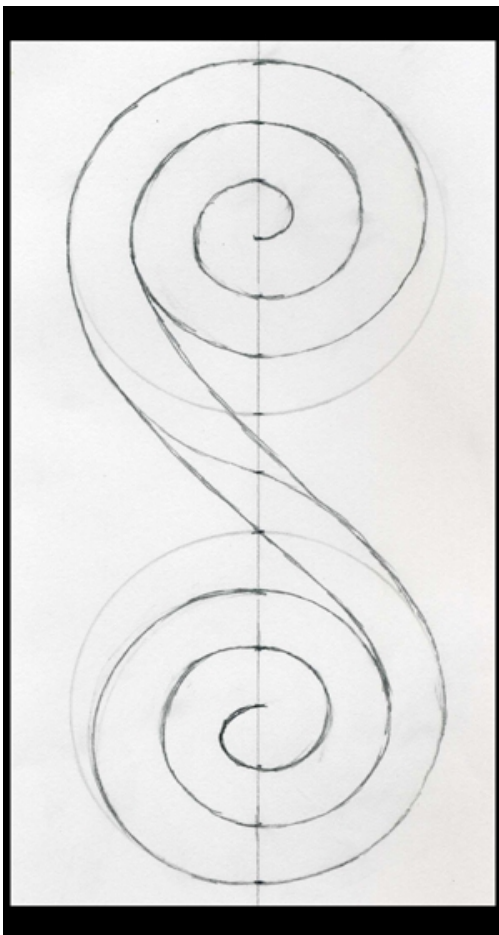


So... ready to draw in the 2nd spiral? We'll follow the exact same steps, only starting down at 6 o'clock on the circle & going up to the 1st tic mark at 12 o'clock. Etc. Here it is with the 2nd spiral completed:





Now let's fill in the "S" connection. From the 9 o'clock position on the outside edge of the upper spiral, draw in a slightly curved line to 3 o'clock on the 1st inside line of the lower spiral.

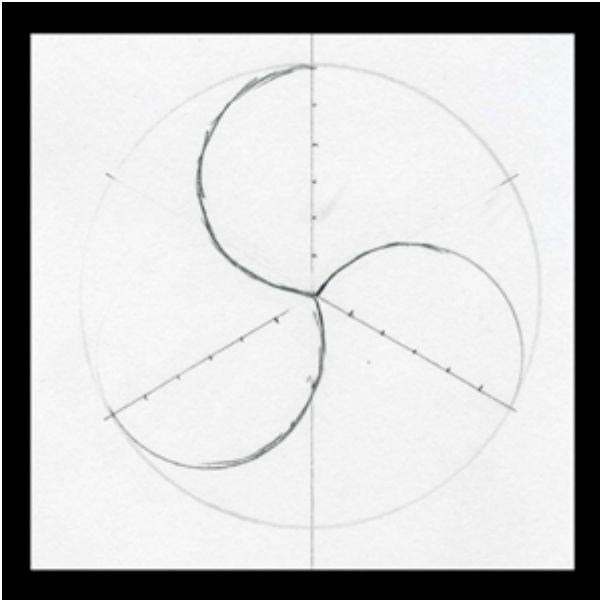


Do the same from the 3 o'clock position on the outside edge of the lower up to the 1st inside line at 9 o'clock on the upper spiral.

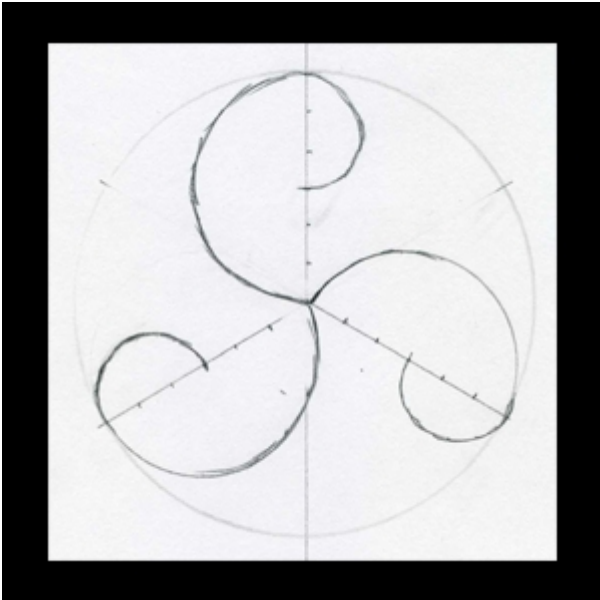
Erase any compass lines or guides you don't need

A Celtic triskele that spirals from the center toward the outer edge.

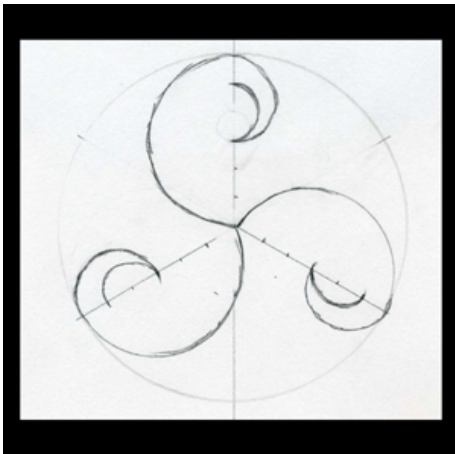
Draw a circle 3" in diameter, divided into 3. On your lines, make tic marks every 1/4 inch. We'll call them A (midline), B (120 degrees), & C (240 degrees). On the *left* side of line A, draw in a half circle from the outside edge to your midline. Repeat on lines B & C. You should have a super simple triskele that is rotating counter clockwise.



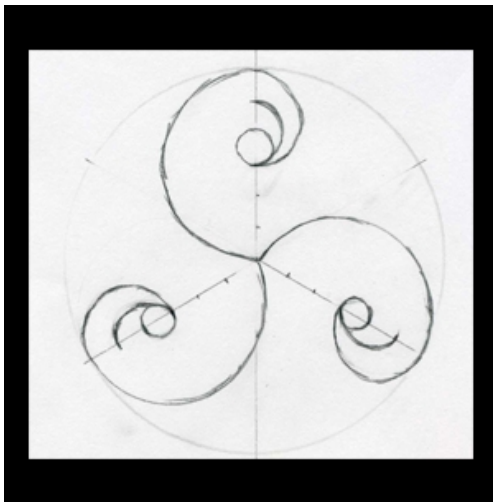
On the *right* side of line A, draw in a half circle from the outside edge of the circle to the 3rd tic mark. Repeat on B & C.



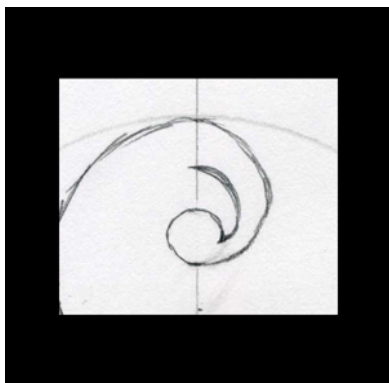
Still on the right side of the line A, draw in a half-circle from the 1st tic mark to the 3rd. And repeat (for this triskele design, just assume I mean to repeat each step for each line).



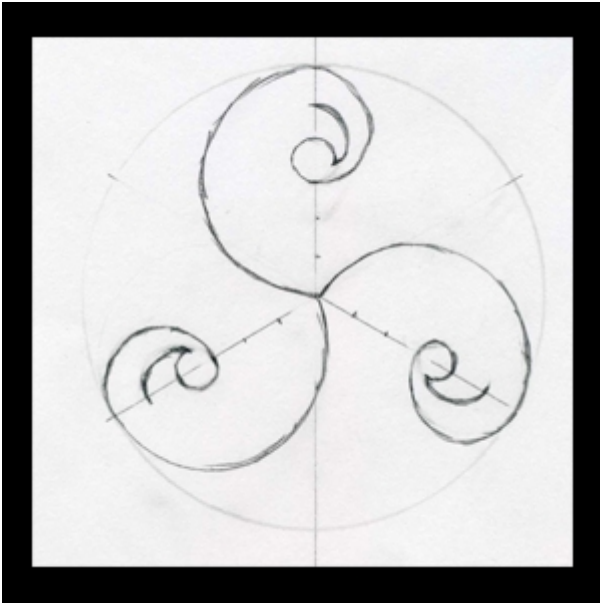
Now draw in a **full** circle using the 2nd & 3rd tic marks.



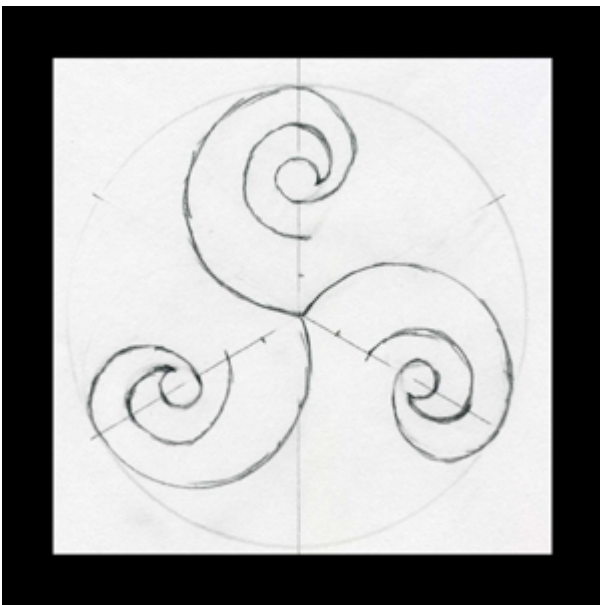
Notice how there's a spot where the curve of the inner half-circle departs from the small circles we just drew? Erase the part that they share like this:



So now you should have this:



Back to the left side of the line. Draw in a half-circle from the 1st tic mark to the 4th.



Extend that curve past your A line so it meets with the peak of the big curve on line B.



erase your guidelines & the curves that cross into the interior area



If you liker, in the spaces outside of the triskele, add in triangle-ish shapes that follow the curves. I tend to do them about 1/8" away. And let's do the same thing *inside* of the triskele. Here's mine:

