Create a model of the hyperbolic plane that illustrates the ideas we've studied.

Possible approaches:

- Use beads . Go to `http://www.sciencenews.org/articles/20040417/mathtrek.asp` to see such a model

- Crochet. See
  `http://www.math.cornell.edu/~dwh/books/eg00/supplements/AHPmodel/index.html`
  for directions (you have to scroll down the page a bit)

- Sew a model. See `http://www.sciencenews.org/articles/20030830/mathtrek.asp` to see a photo of such a quilt

You are also welcome to come up with your own idea, but if you'd like to do so, please run it by me first.

You can go the extra mile by representing some of the ideas about lines that we've learned on your model.

As always write a description of what you did. In this case, you will be describing, in your own words, what the hyperbolic plane is, and why your creation models it. If you added lines to your creation, you will also explain what point they are illustrating, and how your illustration differs from Euclidean geometry. Title your work.

Possible Points: If you crochet, bead, or sew a model, if your model looks correct, and if it's large enough to give a feel for the undulation of the plane, can earn up to 20 or 25 points (to some extent, this depends on whether you created a pattern of your own, or how hard the pattern you used was to follow). Cutting out triangles from paper and taping them together will generally earn 10 points, but can earn more if the model is sufficiently large and correct, the triangles sufficiently equilateral, and/or if there is some artistic meaning to the patterns on the paper that connects to the overall theme of higher dimensions or non-Euclidean geometry.