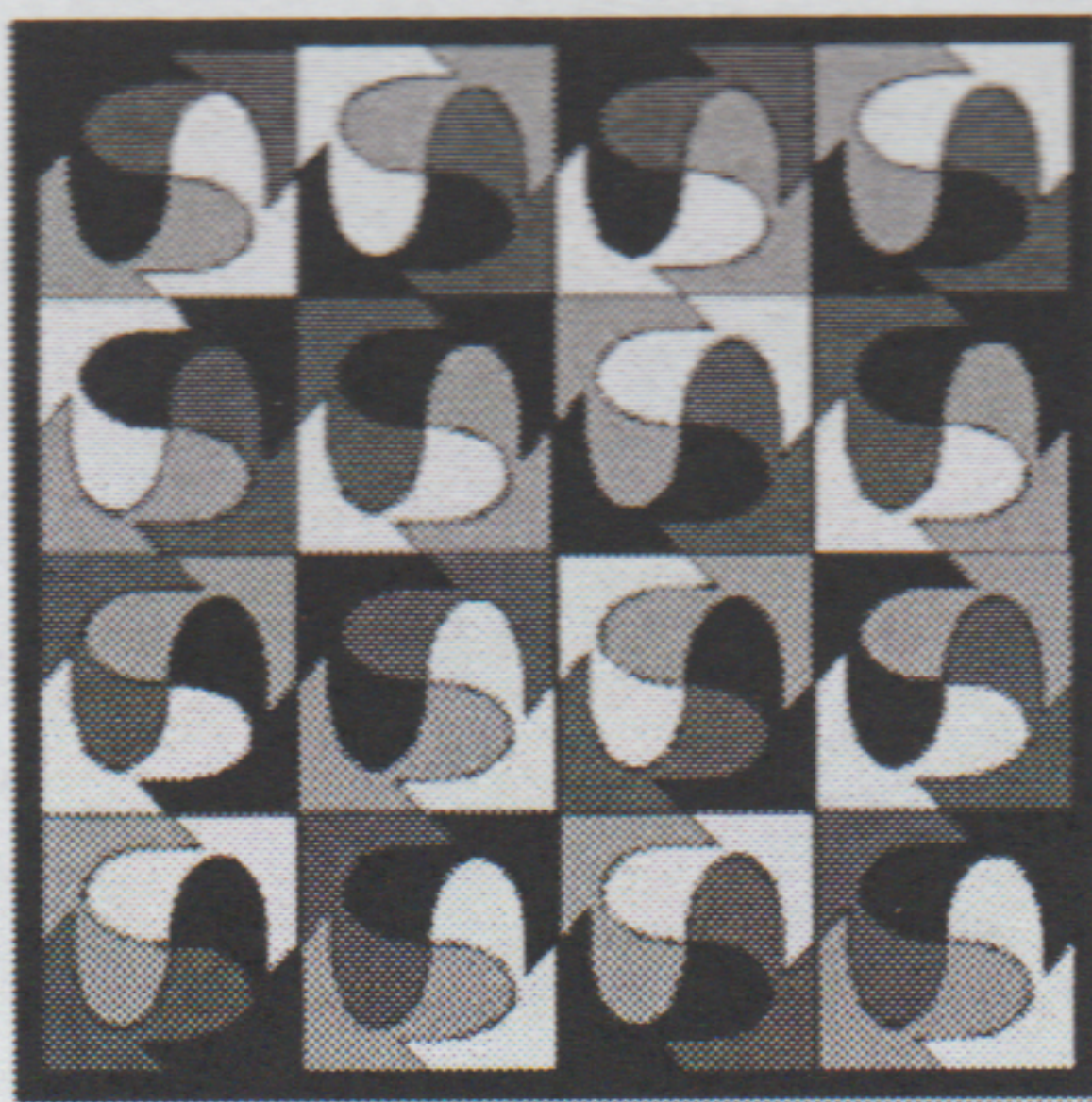


Geometry
Written Assignment: Tessellations
Total Points = 50

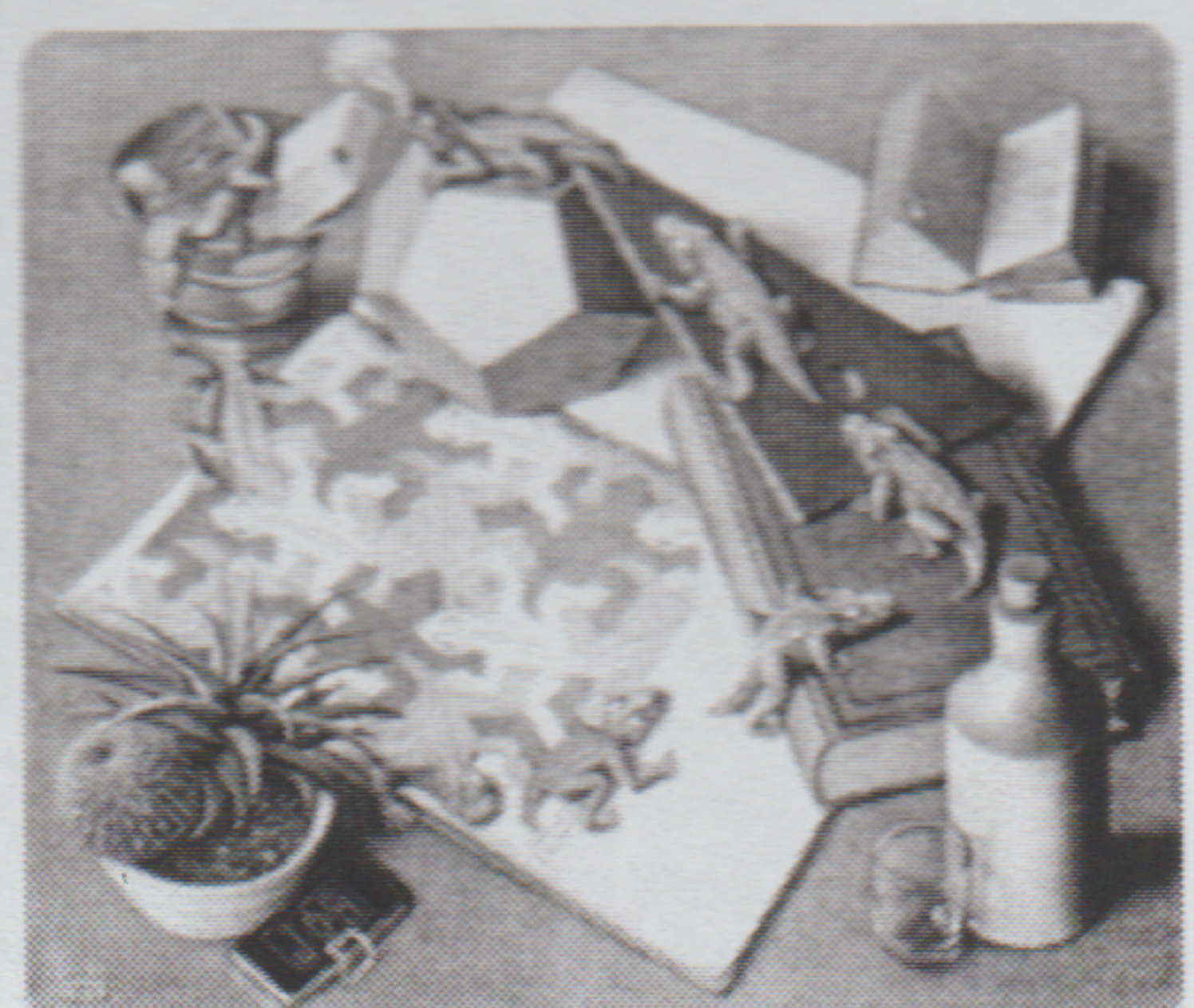
In this assignment you will apply transformations: translation, reflection, rotation, and dilation.

Introduction:



A tessellation is created when a shape is repeated over and over until it covers a plane without any gaps or overlaps. Think of your bathroom tile or the tile in your kitchen. What does the colorful tessellation remind you of?

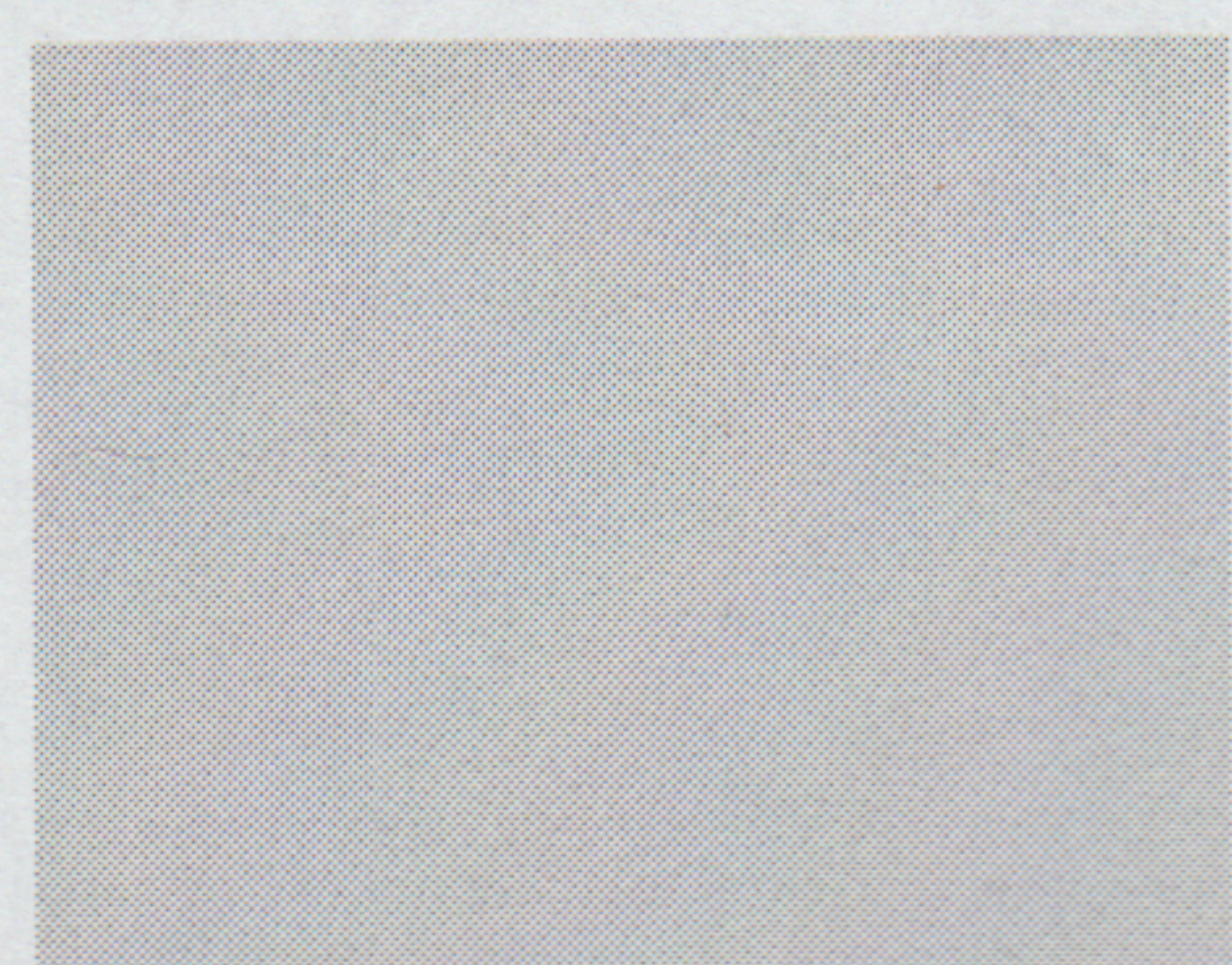
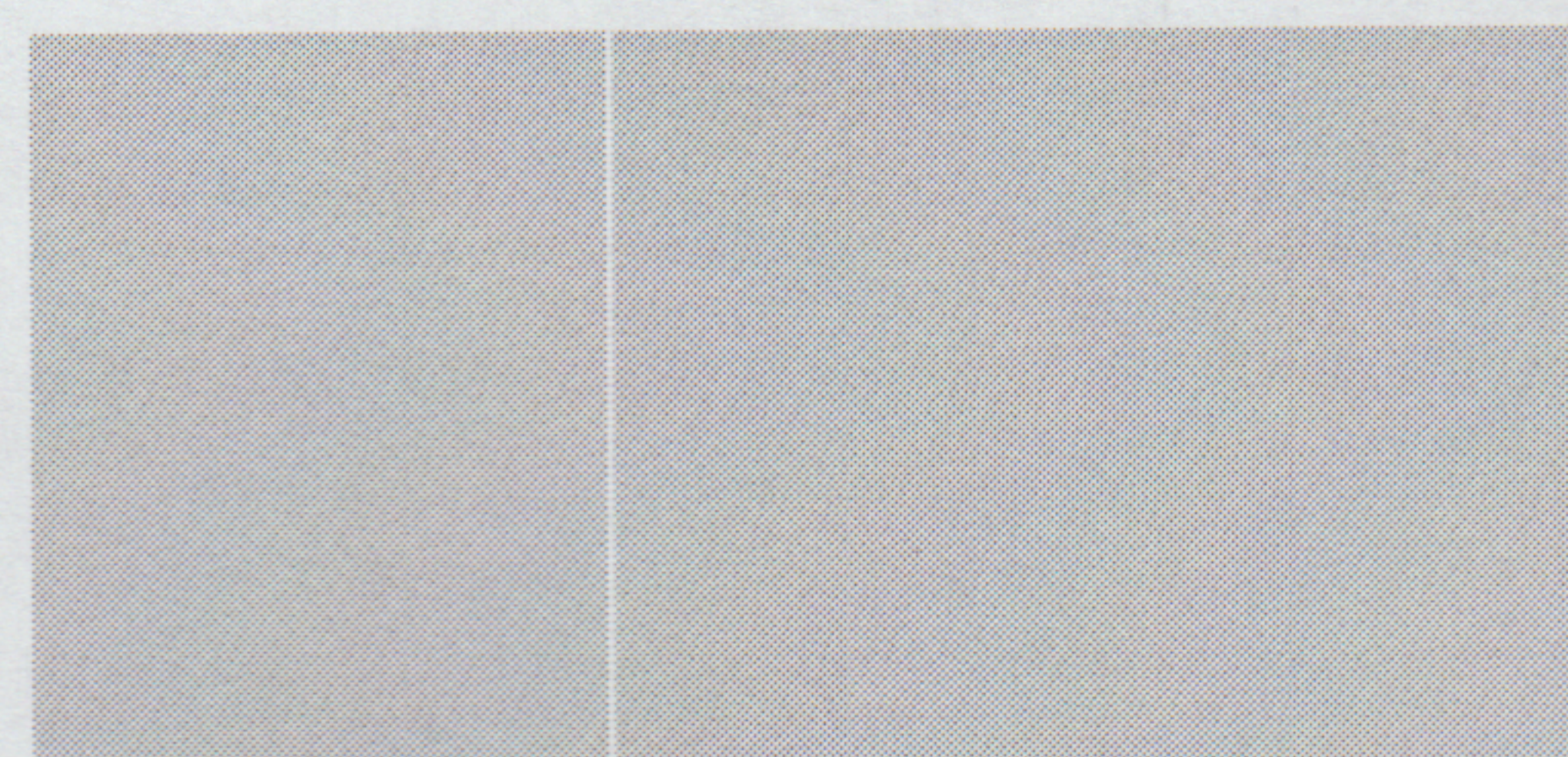
The most famous mathematician was M. C. Escher. In black and white is an example of his artwork. It is titled Escher's Reptiles (1943).



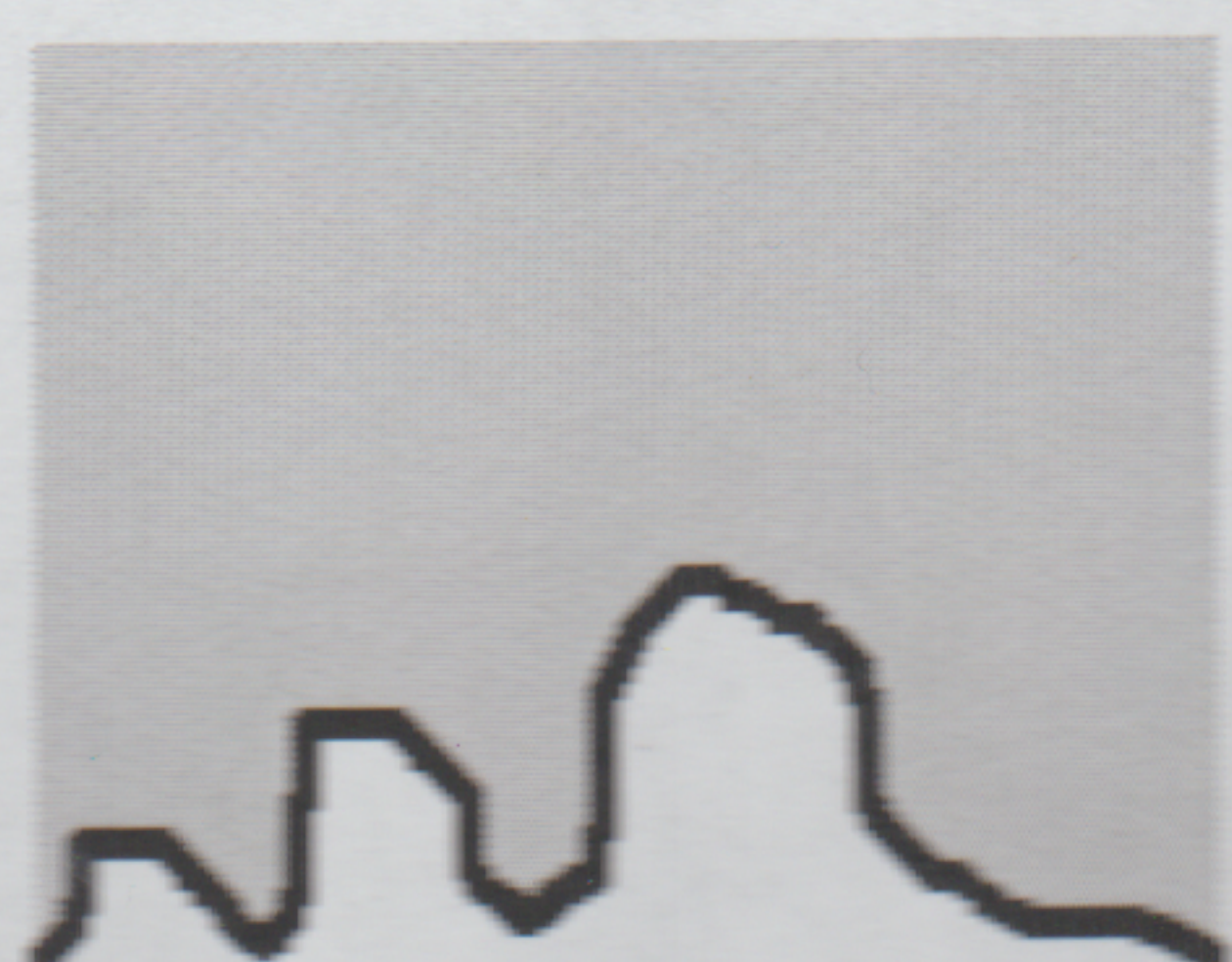
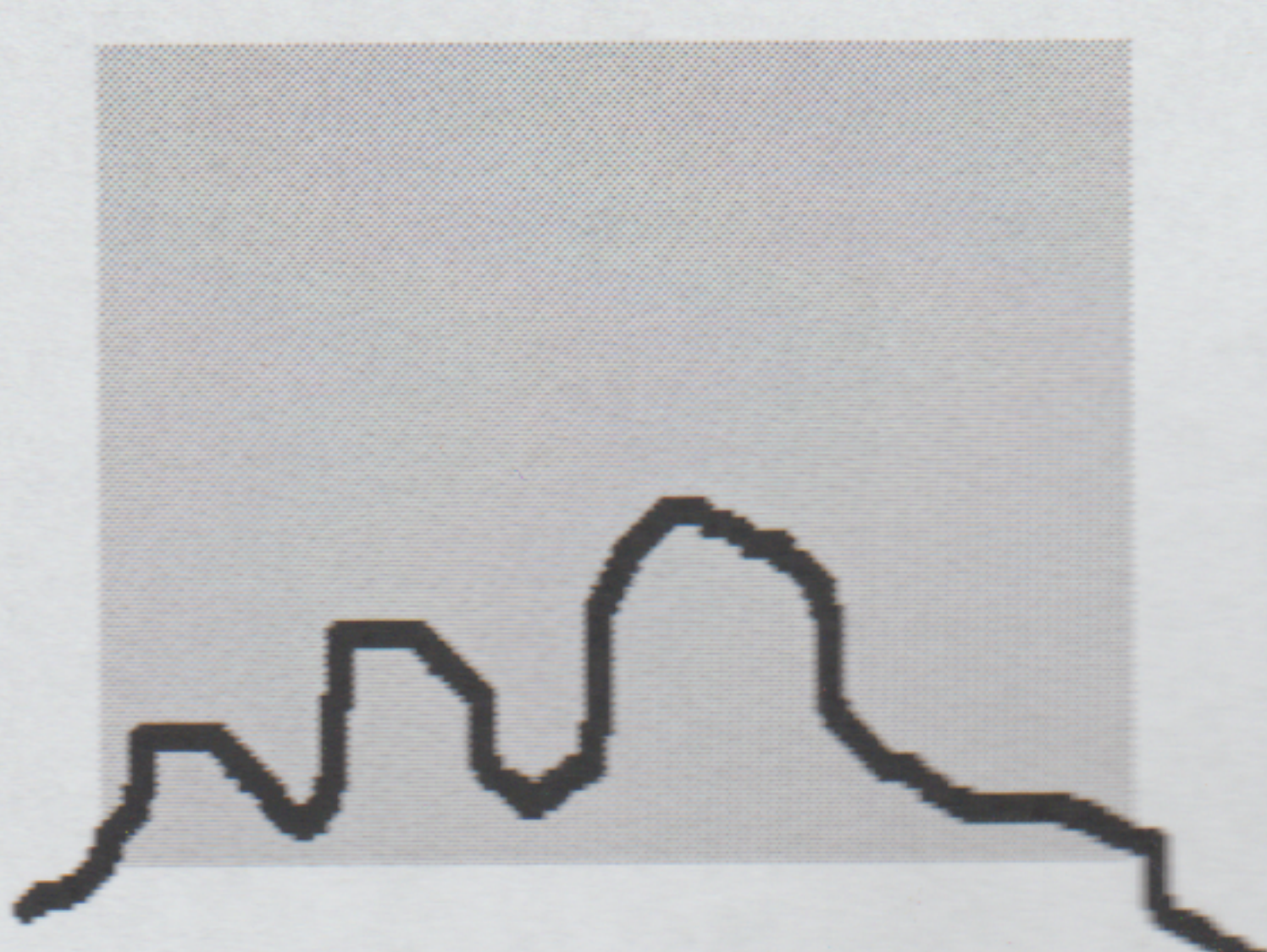
Part 1: Create the original template

Your first step is to create an "original" template to tessellate. Follow the steps below.

Step 1: Use a ruler and index card to make a 3 inch by 3 inch square. Use the image below as an example. It is not drawn to size.



Step 2: Cut a "piece" (wavy line, zigzag line, etc) from the top right corner to the top left corner. Use the image below as an example. It is not drawn to size.



Step 3: Cut a "piece" (wavy line, zigzag line, etc) from the bottom left corner to the top left corner. Use the image below as an example. It is not drawn to size.