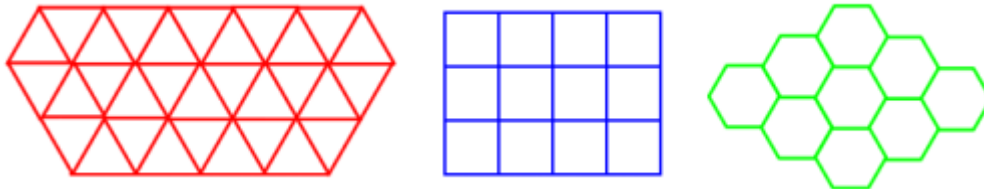


Regular tessellations use identical regular polygons to fill the plane. The vertices of each polygon must coincide with the vertices of other polygons.

You can produce exactly three regular tessellations:



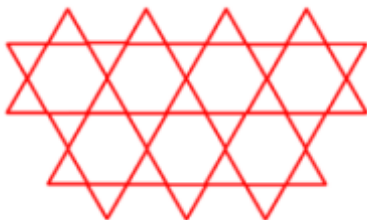
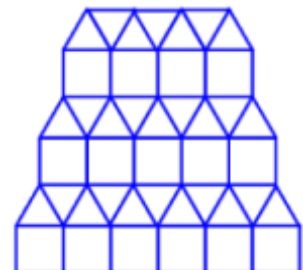
Can you convince yourself that there are no more?

Semi regular tessellations (or Archimedean tessellations) have two properties:

- They are formed by two or more types of regular polygon, each with the same side length
- Each vertex has the same pattern of polygons around it.

Here are two examples:

Triangle, triangle, triangle, square, square {3, 3, 3, 4, 4} meet **in that order** at each point.



Triangle, hexagon, triangle, hexagon {3, 6, 3, 6} meet **in that order** at each point.

Can you find all the semi-regular tessellations?

Can you show that you have found them all?