Let a k-tile *multipolyform* be a generalized polyform on a tiling, that is, a choice of k tiles in the tiling that are edge-adjacent, up to isometries of the tiling.

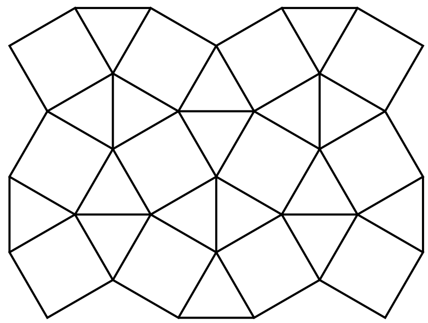

Figure 1: The snub square tiling.

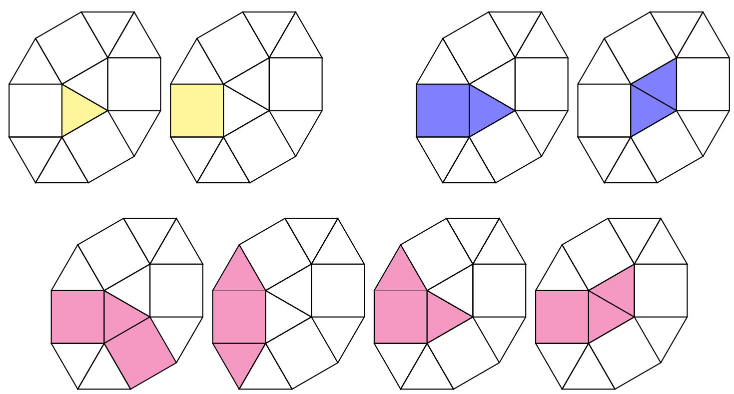

Figure 2: All 1-tile, 2-tile, and 3-tile multipolyforms on a snub square tiling.

Note. It is computationally hard to count polyominos, polyiamonds, polyhexes, etc.

Question. What are the number of multipolyforms on the eleven uniform tilings?

Related.

1. For a given tiling, what is the smallest region that can contain all k-polyforms? (See Problem 77.)
2. What are the number of polysticks on a given tiling? For a given graph?
3. Do the multipolyforms described in the example grow significantly faster than polyominos? How does the tiling affect asymptotic growth?
4. What about other tilings, such as the 15 pentagonal tilings? Penrose tilings?

References.

`https://en.wikipedia.org/wiki/Euclidean_tilings_by_convex_regular_polygons`

`https://en.wikipedia.org/wiki/Polyform`

Square tiling, triangular tiling, hexagonal tiling, snub square tiling.