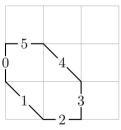
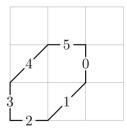
Gluing things from squares

Imagine a gluing of squares

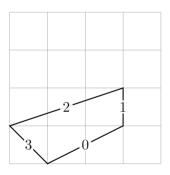
Squares are congruent, and the gluing is edge-to-edge

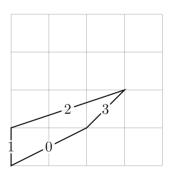
Then the gluing can be drawn on the grid





You can glue this from squares





You can glue this from squares







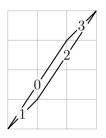


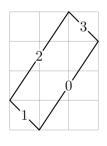


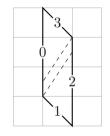


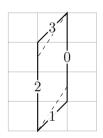


Sometimes it's uncertain what is glued





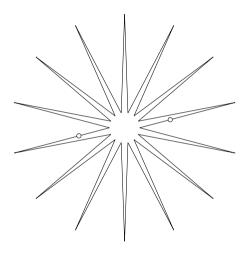




(a)

(b)

Many things can be glued from a single polygon



2n vertices, $2^{\Omega(n)}$ polyhedra.

In our presentation we find out that

- 1) There are $O(n^{36})$ polyhedra that can be glued from at most n squares;
- 2) There are $\Omega(n^3)$ polyhedra that can be glued from at most n squares;
- 3) There are $O(n^3)$ doubly covered polygons that can be glued from at most n squares;