

## Starting Block



**Goal:** Using the five triangular pieces, build a cube in the supplied base.

**How it works:** There are four identical triangular pieces and one additional triangular prism that is a little larger. These five pieces can be put together to form a cube. The provided base is needed to hold all of the pieces in place. The base is two-sided, with one side having a recessed square shape that will support the cube in a flat orientation. This is arguably the easier side to use when building the cube for the first time.

The flip-side of the base has a recessed triangular cutout that will support the cube on one of its corners. It is a bit more challenging to visualize the solution for this configuration.

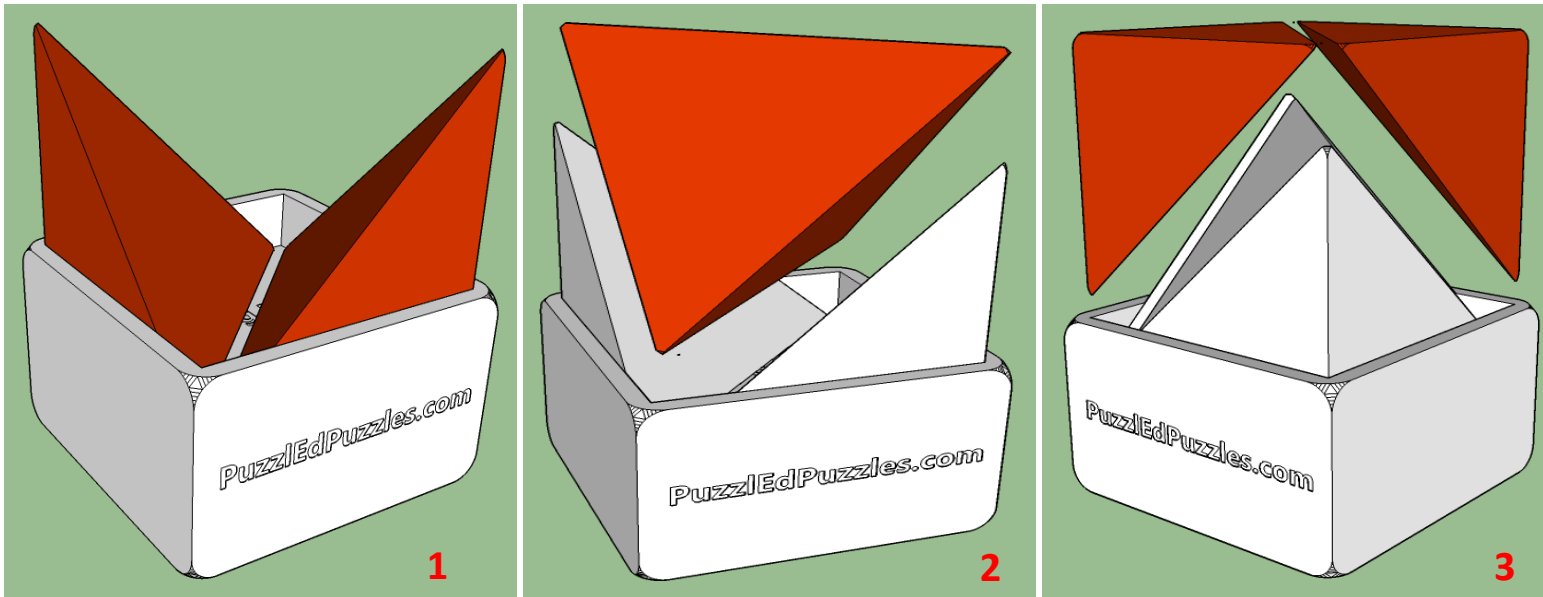
**Strategy:** Solve it on the flat side first (square recess in the base) to see how the pieces all fit together before turning the base over and building it on its corner.

Note that four of the pieces are identical, and one is unique and a little larger than the others. Where would the different piece likely go?

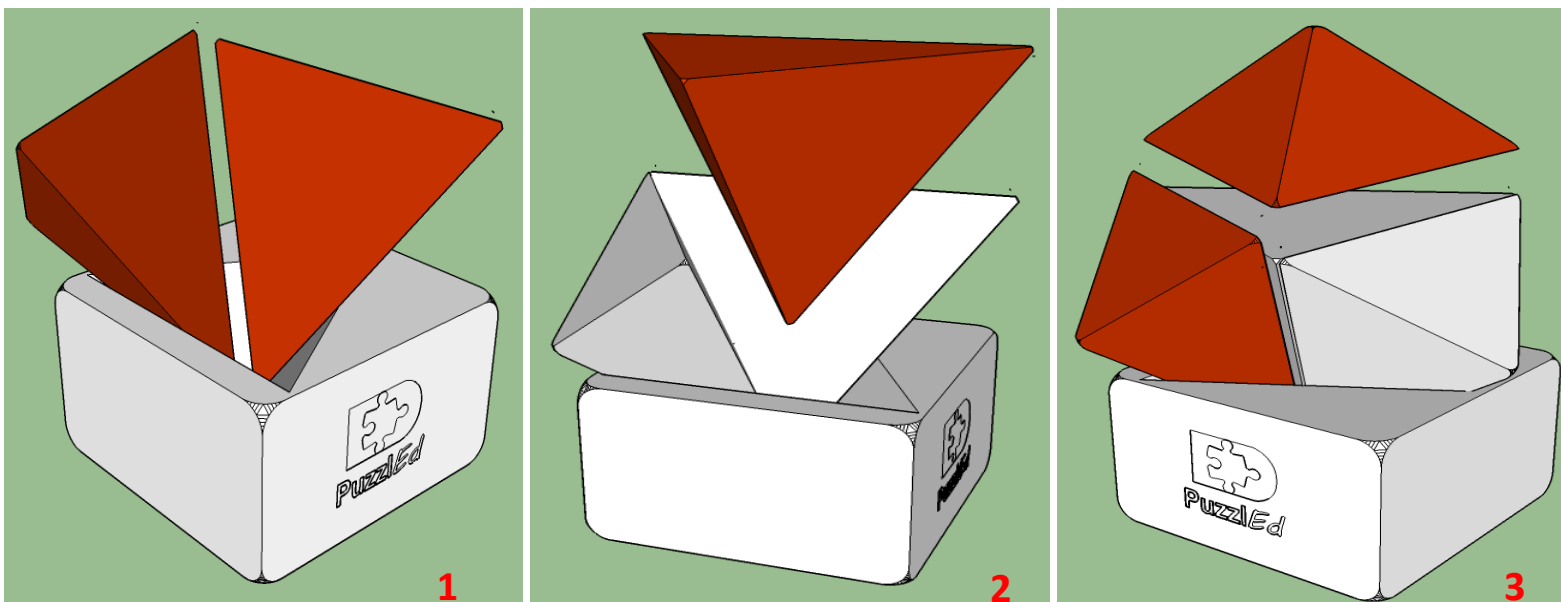
How can you arrange two of the pieces to fit perfectly into the rectangular base?

For the triangular side, it won't work to put a solid corner down first.

Solutions to both configurations are on the back.



**Solution for Flat Configuration (rectangular recess in base):** 1. Place two of the triangular pieces in base as shown; 2. Place larger triangular piece into “valley” as shown; 3. Place the remaining two pieces, points down into the empty corners of the base



**Solution for Corner Configuration (triangular recess in base):** 1. Place two of the triangular pieces in base, points down as shown; 2. Place larger triangular piece point down as shown; 3. Place a third piece point down into empty part of recess, and then put the last piece on the top