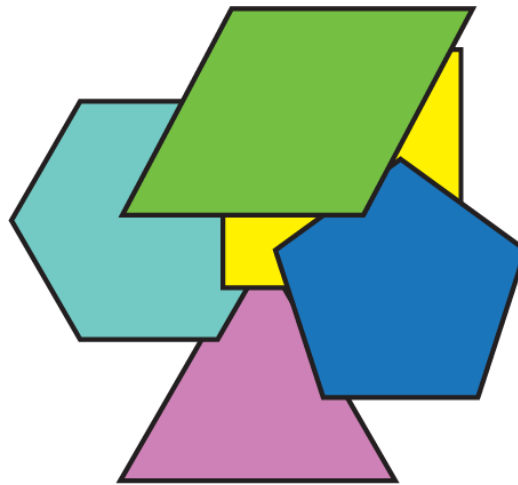## Problem of the Week
Problem A and Solution
Stacking Shapes

Problem

Anna cut out the following five polygons.

She then placed them on a table. The top view after doing so is shown.

In what order did she place the polygons on the table?

Solution

First, we recall the names of the five polygons.

Name	Triangle	Square	Parallelogram	Pentagon	Hexagon
Image					

Since the parallelogram has no shapes covering part of it, it must have been the last polygon placed on the table.

The pentagon has the parallelogram covering part of it, so the pentagon must have been placed before the parallelogram.

The square has the pentagon and parallelogram covering part of it, so the square must have been placed before the pentagon and parallelogram.

The hexagon has the square and parallelogram covering part of it, so the hexagon must have been placed before the square and parallelogram.

The triangle has the hexagon, square, and pentagon covering part of it, so the triangle must have been placed before the hexagon, square, and pentagon.

Thus, Anna must have first placed the triangle, then the hexagon, then the square, then the pentagon, then the parallelogram.