

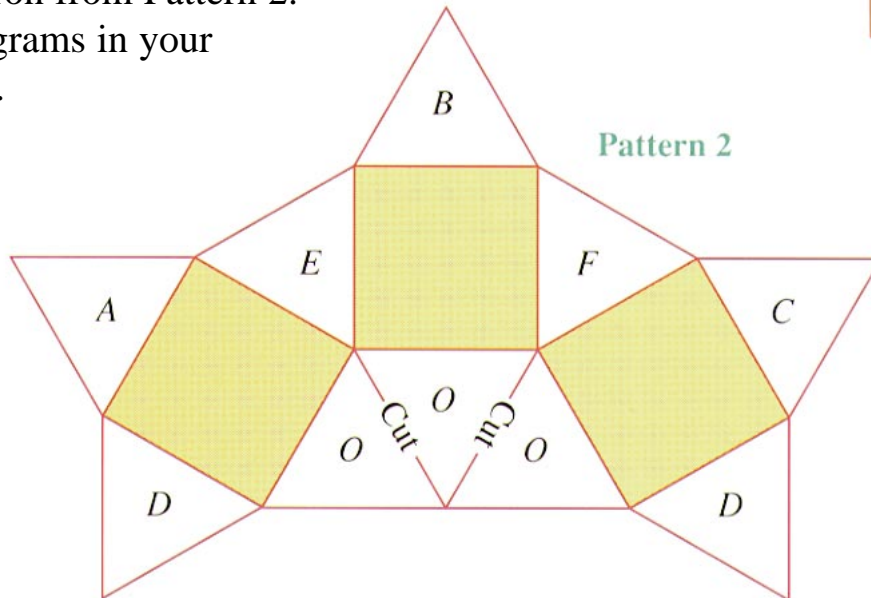
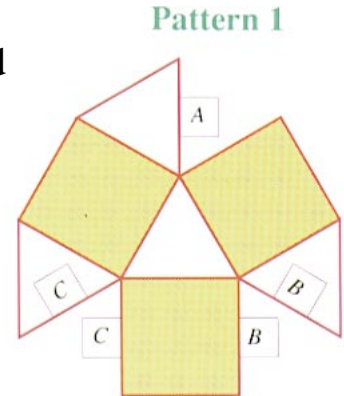
The Cuboctahedron

Problem-of-the-Week

The Problem

Two copies of Pattern 1 can be used to make a solid called a *cuboctahedron*. Construct the pattern, cut out two copies, tape tab A on to square A, and so on.

Pattern 2 can also be used to make a cuboctahedron. Write a clear set of instructions for making a cuboctahedron from Pattern 2. Include diagrams in your instructions.



Strategies and Hints

1. The cuboctahedron has two types of regular polygons for its faces. What are the two polygons and how many of each are there?
2. Some of the polygons in Pattern 2 must be glued on top of each other to make the solid. Describe this step in your instructions.
3. In your instructions, include suggestions for the type of paper to be used and the lengths of the line segments in the pattern.