

Origami: A Good Way to Communicate Mathematics

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Abstract

In this workshop, participants will learn some of the connections between mathematics and origami. Participants will learn how to fold an equilateral triangle and then be given the challenge to prove why their folding method works. For example, you may have to fold the paper in half and then in half again in the other direction and then fold each half in half which demonstrates several times the idea of symmetry.

You can fold almost every polyhedron. Once the polyhedron is folded, you can discuss such concepts as the number of faces, vertices and edges. If you have folded several polyhedrons, you can have the students discover the relationship between the faces, vertices and edges.

In this workshop, participants will learn how to fold a hexa-flexagon, a stellated dodecahedron and a cube.