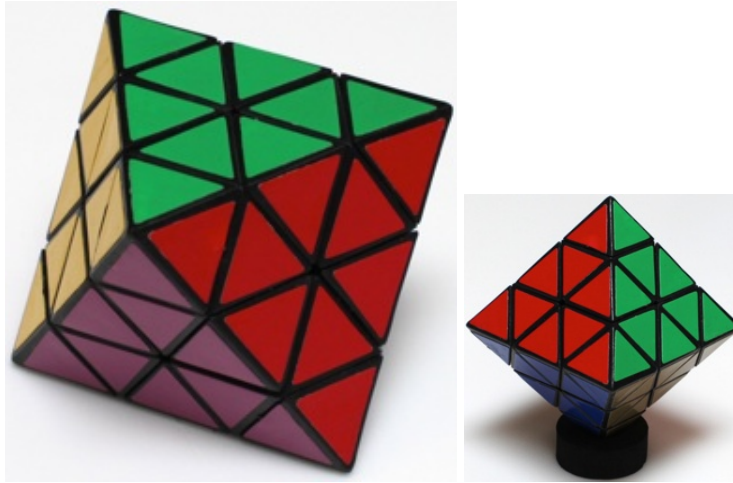# Octahedron

a.k.a. *Magic Octahedron*
Patented by C. Hewlett 1984.
(plastic, 1.8 inches between faces, 3 inches point to point,
opposite faces are green / white, yellow / blue, red / orange, magenta / gold)

This puzzle has the look and feel of a generalized *Pyraminx*. The rotating tips have no effect on solving (the *Flowered Jewel* is the same puzzle without the tips); each pyramid formed by a tip and the layer below it can rotate (this is a different puzzle than the *Super Skewb Diamond*). However, mechanically, the Octahedron is equivalent to a *Rubik's 3x3x3 Cube* without corners (or a *Rubik 3x3x3 Edges Only Cube* with centers) where there is one tip for each face and one face for each corner. The square on which each tip sits is the center of each face of the Rubik 3x3x3 cube and the center point of each face corresponds to a (missing) corner. The correspondence between the Octahedron and the Rubik 3x3x3 Cube may be easier to visualize by looking at the *Full Octahedron* which includes the centers on each face. *Jaaps Page* gives a direct solution.

Further reading:

Jaap's Page, from: http://www.jaapsch.net/puzzles/octahed.htm

Hewlett Patent, from: www.uspto.gov - patent no. 4,451,039

Ibrahim Patent, from: www.uspto.gov - patent no. 4,593,908

Abu-Shumays Patent, from: www.uspto.gov - patent no. 4,706,956

Pitcher Patent Application, from: www.uspto.gov - pub. no. 2005/0006842 A1