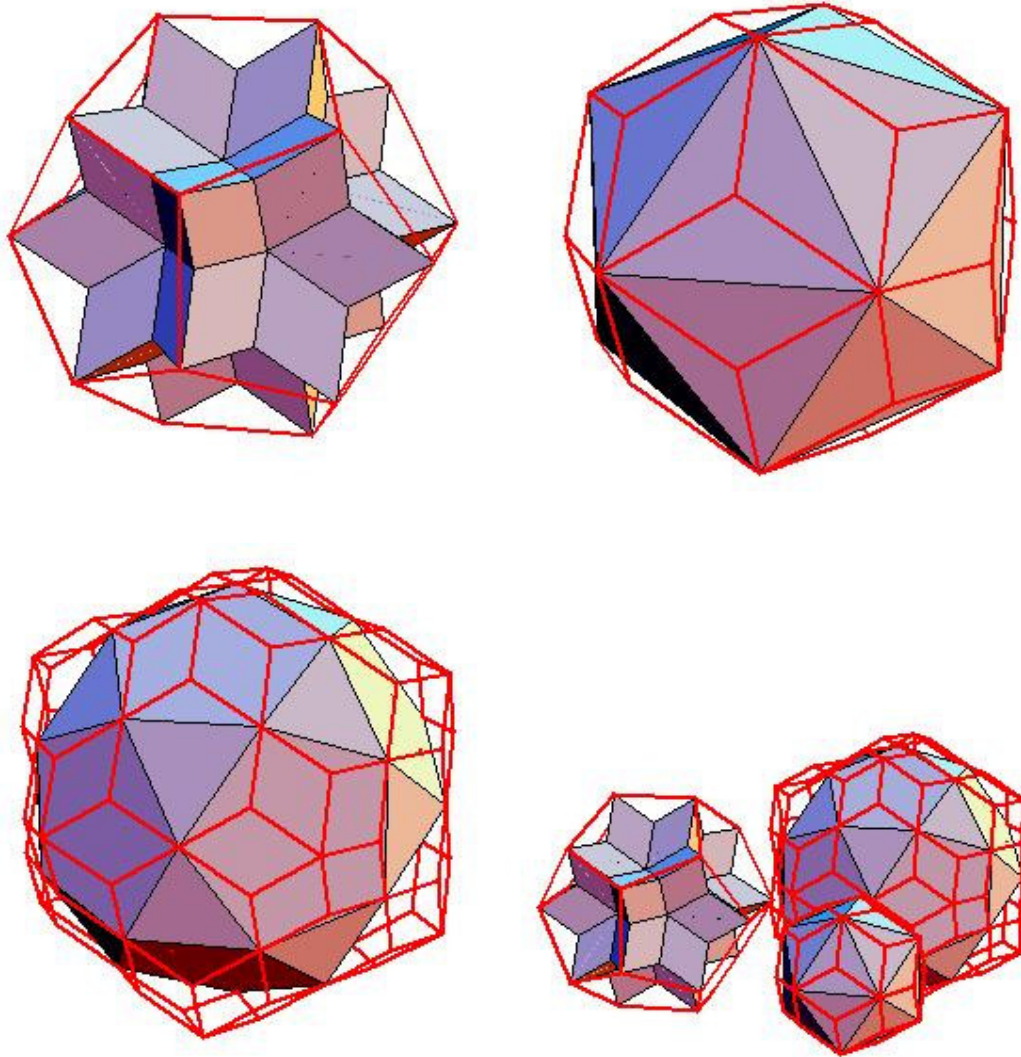


Solution of Conway-Radin-Sadun Problem, Second Example

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It was proved [1] that it was possible to dissect icosahedron, dodecahedron, and icosidodecahedron into finitely many pieces that can be reassembled to form a large cube. The authors admitted that they had no idea how to perform such dissections. A solution was found in [2]. But there is another solution, and has been on internet for some years [3].



Namely, hexecontahedron, triacontahedron and 120-hedron can be dissected to dodecahedron, icosahedron and icosidodecahedron. 120-hedron is rhombic solid we get from double triacontahedron by removing 20 oblate rhombohedra from its surface.

References

[1] J. H. Conway, C. Radin, and L. Sadun, On angles whose squared trigonometric functions are

rational, *Discrete & Computational Geometry*, 22 (1999), pages 321-332.

[2] I. Hafner, Solution of Conway-Radin-Sadun Problem.

[3] I. Hafner, T. Zitko, [Relations among rhombic, Platonic and Archimedean solids](#)

- published in [Visual Mathematics Vol.4, No.2, 2002, 2, \(4\)](#)