Program Name

4D

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Category

Mathematics

Description

The program displays a four dimensional cube. The cube can be rotated in four dimensional space and the eight cells which make up its boundary can be hilighted.

A cube is a regular solid. All such regular solids are known. A menu allows the user to display any of the regular three dimensional solids (of course there are five) and any of the regular four dimensional solids (there

are six) and rotate them in four-space. This exhausts the list of interesting regular solids because in all dimensions greater than four there are only three: the tetrahedron, cube, and octahedron.

Uses

We often show classes the film made by Tom Banchof at Brown University about the four dimensional cube. After seeing the film, students can use this program to manipulate the object themselves.

NeXT Release

2.1

Installation Instructions

None needed.

Comments

This program can be distributed freely.