## Rubik 1x3x3 Floppy Cube



Designed by Katsuhiko Okamoto 2007, purchased from Gentosha, Japan, 2009. (plastic, 2.25 by 2.25 by $3 / 4$ inches;
by the same designer as the Rubik $3 \times 3 \times 3$ Void Cube.)
Seems to impossibly stay together as sets of three are flipped:


Notation: L (left), R (right), F (front), B (back) denote flip that side.
Jaap's Page presents a computer analysis that shows there are only 192 reachable positions, each requiring at most 8 moves to solve. By just playing with this puzzle it usually does not take very long to solve, or to get it to where it can be fixed with the following simple transformation:


## FRFRFR

(flip two adjacent edges)

The directions that came with the puzzle also present the following transformations (after doing the last two, rotate or turn the puzzle over to get the views shown):


## LFLRBR

(flip two opposite edges)


LFLRFR
(exchange opposite edges)


F L R B
(flip center and exchange two opposite edges)

## Further Reading

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

