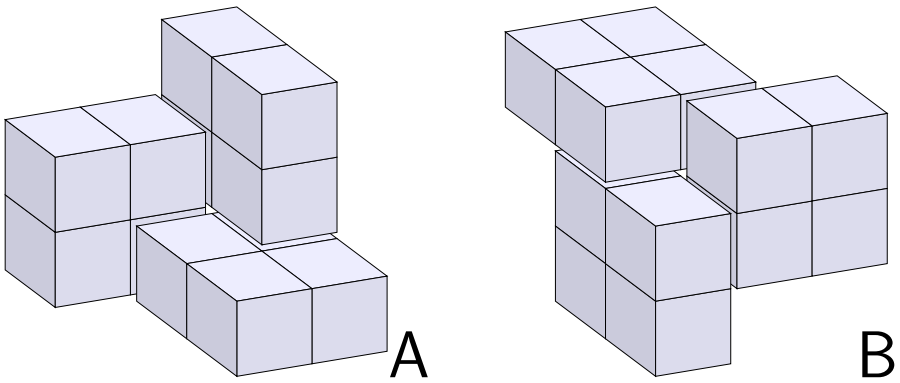
I U P U I
Math Club Teaser #47

September 17, 2010
(due September 24, 2010)

Solution

Arrange three blocks in configuration A, and three block in configuration B (they are identical, but seen from different angles). You can see that there is space for one cube in the back of A and one cube in front of B, right at the corners where three blocks meet.



Configurations A and B fit together. Adding the two corner cubes forms a $3 \times 3 \times 3$ box with a hollow center; this is where the last cube goes.

Solved by:

anhanh29, Captain Nemo, Aaron Goins, Team JDS, Bill Karr, Jennifer Kieffaber, Mathēmatikoi, ΦΔΘ, Josh Rafail, Think Before You Act.