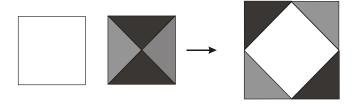




Proposed by Bernardo Ábrego and Silvia Fernández.

September 27-October 4

The figure below shows how to cut two squares of area 1, so that the pieces can be rearranged to form a square of area 2.



Show how to do the same with three squares. That is, show how to cut three squares of area 1 so that the pieces can be rearranged to form a square of area 3.

From all submitted solutions, the first one using the smallest number of pieces will be awarded. Multiple solutions are accepted (and encouraged).

Deadline: October 4, 2004 before 9:00 PM.

Look for the "Problem of the Week" every Monday in the Daily Sundial (Daily Spotlight section) or in our web site www.csun.edu/math/probweek

Rules:

- 1. Open to all enrolled undergraduate and graduate CSUN students.
- From all submitted solutions, the first one using the smallest number of pieces will be awarded a diploma and the choice of a magnetic building set or a five dollar prize.
- 3. The winner solution and the names of the authors of all correct solutions will be published in our web site (www.csun.edu/math/probweek). All authors whose solutions are complete and correct will receive certificates.
- 4. All solutions must be typed and sent electronically. PDF, Latex, or Word files are preferred.
- 5. All steps of the solution must be clearly justified.
- 6. Email your solution with subject "Problem of the week" to Bernardo. Abrego@csun.edu
- 7. Late solutions will not be considered.
- 8. For any questions contact the organizers

Bernardo. Abrego@csun.edu, Silvia. Fernandez@csun.edu

If you like puzzles and challenging problems ... join the Mathematics Department Problem Solving Workshop. We meet every Friday at 2:00 PM in FOB room 108. For more information visit our web site: www.csun.edu/math/workshop.