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.
2. 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.