Problem of the Week.

April 26-May 3

Proposed by Bernardo Ábrego and Silvia Fernández.

Prove that if nine points are chosen in the interior of a unit square, then three of them form a triangle with area at most 1/8. (Note: If three points are on the same line, we say that the triangle they form has area zero).

Deadline: May 3, 2004 before 9:00 PM.

Next problem of the week: Available in our web site on May 3 at 2:00 PM.

www.csun.edu/math/probweek

Rules:

- 1. Open to all enrolled undergraduate and graduate CSUN students.
- 2. This week the first complete and correct solution will be awarded a diploma and the choice of the book "A Beatiful Mind" by Sylvia Nasar (a biography of John F. Nash) 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 or 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.