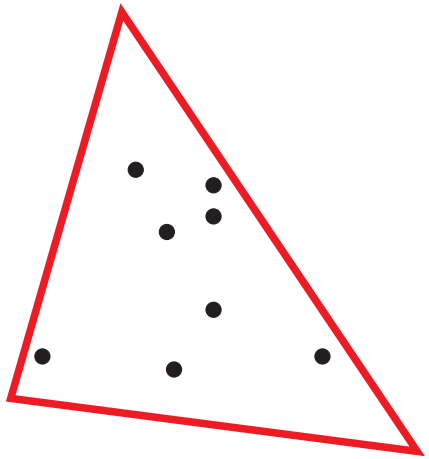
California State University Northridge

Department of Mathematics

Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

February 19-26



There are n points in the plane such that the area of the triangle formed by any three of them has area at most 1.

Show that there is a triangle of area 4 that contains all n points. (The vertices of this triangle are not necessarily part of the n points.)

This contest is sponsored by the Mathematics Department. Open to all CSUN students. Winner gets $5 or an equivalent prize. All complete and correct solutions get a certificate. **Special prizes will be given to the three people solving the most number of problems correctly during the semester.**
Type and send your solution before February 26th, 9:00PM to **silvia.fernandez@csun.edu**.
All steps of the solution must be clearly justified.
For rules, winners, solutions, and more information visit: **www.csun.edu/math/probweek**