California State University
Northridge



Department of Mathematics

Proposed by Bernardo Ábrego and Silvia Fernández

April 30-May 7

Let $P(x)=x^3-3x+1$. Find a monic polynomial whose roots are fifth power of the roots of P.

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 May 7th, 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