

Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

March 6-13

Let N be a number with 10 digits written in base ten with the following property: The first digit indicates the number of zeros in N , the second digit indicates the number of ones, the third digit the number of twos, and so on until the tenth digit which indicates the number of nines in N .

Find the number N . Explain your reasoning.

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.

Type and send your solution before March 13th, 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