

Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

October 30-November 6

Prove that the sequence

$$\{ \lfloor \sqrt{2} n \rfloor \}, n = 1, 2, 3, \dots$$

has an infinite number of powers of two.

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 November 6th, 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