

## Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

October 31-November 7

Show that 2005 cannot be written as the sum of numbers each of them equal to 119 or 18. However, prove that any number greater than 2005 can be written as a sum of numbers each of them 119 or 18. For example 2010 is the sum of six 119s and seventy two 18s, that is,  $2010 = 119(6) + 18(72)$ .

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 7th, 9:00PM to [bernardo.abrego@csun.edu](mailto:bernardo.abrego@csun.edu).

All steps of the solution must be clearly justified.

For rules, winners, solutions, and more information visit: [www.csun.edu/math/probweek](http://www.csun.edu/math/probweek)