

## Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

May 1-8

Suppose  $f : \mathbb{C} \rightarrow \mathbb{C}$  is a function such that

$$f(a) - b = f(a + f(b))$$

for all complex numbers  $a$  and  $b$ .

Find with proof the value of  $(f(1))^2$ .

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 May 8th, 9:00PM to [silvia.fernandez@csun.edu](mailto: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](http://www.csun.edu/math/probweek)