

Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

September 15-22

Evaluate,

$$\sqrt{\underbrace{111 \dots 111}_{2000 \text{ digits}} - \underbrace{222 \dots 222}_{1000 \text{ digits}}}$$

Your answer should be a number in decimal notation, without square roots or any other algebraic operation.

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 September 22nd, 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