

Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández

April 23-30

$ABCDEF$ is a convex hexagon such that the diagonals AD , BE , and CF all bisect the area. Prove that these diagonals are concurrent.

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. **Special prizes will be given to the three people solving the most number of problems correctly during the semester.**

Type and send your solution before April 30th, 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