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Caroline N Haddad* (haddad@geneseo.edu), SUNY Geneseo, Department of Mathematics, 1 College Street, Geneseo, NY 14454. *Linear Complementarity and Minimization in the One- and Two-Norms*. Preliminary report.

Many applied problems can be formulated as a minimization problem of a linear form over the nonnegative orthant. Results are fairly well-known for such problems involving the 2-norm, however, there are few results for minimizations involving the one-norm. Both problems can oftentimes be reformulated as a linear complementarity problem, a type of mathematical programming problem. I will present results relating the minimization of $Ax - b$ over the nonnegative orthant to the linear complementarity problem. Least squares, quadratic minimization, and linear complementarity will be introduced as needed. (Received September 30, 2000)