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Jai N Singh* (jsingh@barry.edu), 11300 NE Second Avenue, Miami Shores, FL 33161, **M Shakil**, FL , and **D. Singh**. *Some Applications of the Bolzano-Weierstrass Theorem for Linear Optimization.*

In this paper, we present some results to investigate the problem of unboundedness of a linear optimization problem using an asymptotic cone, asymptotic regularity, and some other topological properties of the solution set. We apply the Bolzano-Weierstrass theorem on the convergence in a finite-dimensional Euclidean space R^n , and explicate a mathematical remedy to deal with the asymptotic behavior of the unbounded solution set in Linear Optimization. (Received August 14, 2021)