1014-Z1-835   **James J Reynolds*** (`reynolds@clarion.edu`), Mathematics Department, Clarion University, Clarion, PA 16214. *Challenges for Students from the Final Simplex Tableau - Adjusting the Optimal Solution when the Constraints Change.*

This presentation uses both an applied example and the general simplex tableau structure to explore the matrix relationship between the initial and final simplex tableaus for a standard max L. P. problem. Specifically, a matrix B^{-1} is identified such that $B^{-1}*$(Initial Tableau) = (Final Tableau). The matrix B^{-1} and this relationship are then used to show how the final tableau provides not only the answer to the original problem, but also the means to adjust the solution when the constraints change. This leads to a collection of interesting interpretative questions for students. (Received September 25, 2005)