1145-05-1932 Shaun V. Ault* (svault@valdosta.edu), Valdosta, GA, and Joanne A. Wardell
(jawardell@valdosta.edu), Valdosta, GA. Toward an Understanding of Skewed-Top
Corridors. Preliminary report.
Consider lattice paths in $\mathbb{Z}^{2}$ starting at the point $(0,1)$ that remain strictly above the $x$-axis, below a line of positive slope in the first quadrant, and whose allowable moves are up-right and down-right. We say that such lattice paths exist within a skewed-top corridor. The number such paths ending at each point within the skewed-top corridor may be arranged into an array. We have found that the diagonal sequences within a dualized version of this array exhibit a predictable pattern in which certain subsequences have degree given by an explicit formula. The formulas for starting/ending points of each subsequence and degree depend only on the parameters of the skewed-top corridor and not the values of the corridor numbers themselves. (Received September 24, 2018)

