1107-13-405

K Alan Loper* (loper.4@osu.edu), 1179 University Drive, Newark, OH 43055. Star Operations defined by quadratic transforms and comparable ring extensions. Preliminary report.

Let D be an integral domain and let x and y be elements of D such that neither x/y nor y/x is in D. Then a star operation on D can be defined by extending ideals of D to both D[x/y] and D[y/x] and intersecting. This can be extended naturally to more than two elements and can also be iterated. We examine properties of the resulting star operations. (Received January 19, 2015)