1053-13-147   **Jesse Elliott*** (`jesse.elliott@csuci.edu`), 305 Channel Islands Drive, Camarillo, CA 93012.
Functorial properties of star operations.

We define a *universal star operation* to be an assignment $* : A \longmapsto *_A$ of a star operation $*_A$ on A to every integral domain A. Prime examples of universal star operations include the divisorial closure star operation v, the t-closure star operation t, and the star operation $w = F_\infty$ of Hedstrom and Houston. For any universal star operation $*$, we say that an extension $B \supset A$ of integral domains is $*$-*ideal class linked* if there is a group homomorphism $\mathrm{Cl}_{*_A}(A) \longrightarrow \mathrm{Cl}_{*_B}(B)$ of star class groups induced by the map $I \longmapsto (IB)^{*_B}$ on the set of $*_A$-ideals I of A. We study several natural subclasses of the class of $*$-ideal class linked extensions. (Received August 31, 2009)