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*Generalized Unique Factorization Domains.* Preliminary report.

We define a generalized unique factorization domain (GUFD) as a domain in which every element that factors does so uniquely. Given an irreducible element  $x$  in a ring  $R$ , we build four sets that are composed of elements whom  $x$  “acts prime on” with respect to either the set itself or  $R$ . We use these sets to help us understand the properties of GUFDs. (Received September 03, 2014)