1126-13-16 **Michael C Steward*** (steward.57@osu.edu). *Factoring Integrally Closed Homogeneous Monomial Ideals in Three Variables.* Preliminary report.

In a ring $k[x, y, z]$, where k is a field, some ideals are non-cancellative. This complicates the investigation of ideal factorization, since for instance, $(x, y)(x, y)(x, y) = (x, y)(x^2, y^2)$. If we instead consider only integrally closed ideals, we avoid this issue. To simplify, we restrict our attention to integrally closed homogeneous monomial ideals of $k[x, y, z]$. I will discuss a connection to convex hulls in the plane and demonstrate that the elasticity of the monoid is infinite. (Received November 02, 2016)