1053-13-78   **John J. Watkins*** (`jwatkins@coloradocollege.edu`), Department of Mathematics, 14 East Cache La Poudre Street, Colorado Springs, CO 80903. *Krull Dimension of Polynomial Rings.*

We present a fundamental theorem due to J.W. Brewer, W.J. Heinzer, et al, on the height (or codimension) of prime ideals in polynomial rings, and use this theorem to give elementary proofs of several well known results concerning Krull dimension for polynomial rings. (Received August 16, 2009)