1023-05-367 **Victor Reiner*** (reiner@math.umn.edu), School of Mathematics, University of Minnesota, Minneapolis, MN 55455, and **Larry Smith** and **Peter Webb**. A generalization of the

 $Chevalley\hbox{-}Mitchell\ theorem.$

Chevalley's theorem on the coinvariant algebra of a complex reflection group G was generalized by Mitchell to a statement valid over any field, involving groups G whose invariants are polynomial. We generalize this to a theorem about the invariants of any subgroup H of such a group G, and conjecture a further generalization that would also generalize Springer's theory of regular elements. (Received September 08, 2006)