

1077-13-2650      **Brian Johnson\*** ([s-bjohns67@math.unl.edu](mailto:s-bjohns67@math.unl.edu)), 203 Avery Hall, University of Nebraska - Lincoln, Lincoln, NE 68588-0130. *Prime avoidance avoidance*. Preliminary report.

Prime avoidance is a fundamental result in the theory of commutative rings, but in the graded setting (even just  $\mathbb{Z}$ -graded), the theorem is false for homogeneous elements. On our way to developing a general theory of commutative rings graded by arbitrary abelian groups, we note a few alternate proofs of results usually making use of prime avoidance. (Received September 22, 2011)