Abstract. We introduce and investigate the notion of envelope dimension of commutative rings and modules over them. In particular, we show that the envelope dimension of a ring, $R$, is equal to that of the $R$-module $R^{(N)}$. Also we prove that the Krull dimension of a ring is no more than its envelope dimension and characterize Noetherian rings for which these two dimensions are equal. Moreover we generalize and study the concept of simplified radical formula for modules, which we defined in an earlier paper.