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Let $\{R_i\}_{i \in I}$ be a collection of commutative rings. An *ultrafilter* D over the index set I is a filter over I such that for every subset A of I , $A \in D$ if and only if $I \setminus A \notin D$. Define two elements (r_i) and (s_i) of the product ring $\prod_{i \in I} R_i$ to be D -equivalent if the set of all i such that $r_i = s_i$ is an element of D . The *ultraproduct* $\prod_D R_i$ of the rings R_i with respect to the ultrafilter D is the quotient of $\prod_{i \in I} R_i$ modulo D -equivalence of elements. We use some variations on the ultraproduct construction to generate examples of non-standard commutative rings that violate finiteness conditions. (Received September 25, 2000)