



Math for the people, by the people.

Krull dimension

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If R is a ring, the *Krull dimension* (or simply dimension) of R , $\dim R$ is the supremum of all integers n such that there is an increasing sequence of prime ideals $\mathfrak{p}_0 \subsetneq \cdots \subsetneq \mathfrak{p}_n$ of length n in R .

If X is a topological space, the Krull dimension (or simply dimension) of X , $\dim X$ is the supremum of all integers n such that there is a decreasing sequence of irreducible closed subsets $F_0 \supsetneq \cdots \supsetneq F_n$ of X .