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Title: Covering Numbers of Finite Groups

Abstract: Any finite noncyclic group is a union of finitely many proper subgroups. Given such a group G, we define the covering number of G to be the least positive integer m such that G is the union of m proper subgroups. In general, the problem of determining the covering number of a given group can be quite difficult. We will give an overview of some known results on covering numbers, discuss some related concepts, introduce some methods for finding covering numbers, and if time permits, I will discuss some of my own work on this topic.