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Peter A Linnell* (linnell@math.vt.edu), Department of Mathematics, Virginia Tech,
Blacksburg, VA 24061-0123. *Left ordered and discretely ordered groups.*

Let G be a group. I will show that the number of left orders on G is either finite or uncountable. Next if $<$ is a left order on G , then we say that it is discrete if G has a minimal positive element x under $<$; thus $1 < x$ and there is no $g \in G$ such that $1 < g < x$. I will discuss various properties and examples of this notion. Some of this is joint work with Akbar Rhemtulla and Dale Rolfsen. (Received September 14, 2008)