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## Schreier refinement theorem

Canonical name	SchreierRefinementTheorem
Date of creation	2013-03-22 14:40:53
Last modified on	2013-03-22 14:40:53
Owner	yark (2760)
Last modified by	yark (2760)
Numerical id	8
Author	yark (2760)
Entry type	Theorem
Classification	msc 20E15

The *Schreier Refinement Theorem* states that any two subnormal series for a group have equivalent refinements. Here, two subnormal series are considered equivalent if they have the same factors (up to isomorphism), not necessarily in the same order.

This theorem can be used to prove the <http://planetmath.org/JordanHolderDecomposition> Hölder Theorem, and can also be used to prove that the Hirsch number of a polycyclic group is well-defined.