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Keith A. Kearnes* (kearnes@euclid.colorado.edu), Department of Mathematics, University of Colorado, Boulder, CO 80309-0395, and **Ross D. Willard**. *Residually finite varieties*. Preliminary report.

Let V be a variety of algebras in a finite language. We show that if V satisfies a nontrivial congruence identity and is residually finite, then V is generated by a single finite algebra. This extends earlier results of Olshanskii for groups, McKenzie for associative rings, and Premet and Semenov for Lie algebras. (Received January 07, 2009)