1035-51-552    **Michael Cantrell*** (`michael.cantrell@yale.edu`), PO Box 200979, New Haven, CT 06520, and **Robert Price*** (`pricer@rider.edu`), 6 Devon Avenue, Lawrenceville, NJ 086483908.
*Self-intersection properties of generalized Koch curves.* Preliminary report.

The Koch curve is a classical example of a self-similar figure, one in which every open set contains a set geometrically similar to the whole curve. We examine generalizations of the Koch curve based on a generator with arbitrary values for the length of its horizontal section and its angle, which varies between zero and sixty degrees. We obtain a formula giving the pivotal length for each angle. The topological properties of these curves and their complements are discussed, and an analytic description of the double points is provided. Finally, we describe ideas for solving this problem for angles greater than sixty degrees. (Received September 10, 2007)