Paul A Loomis* (ploomis@bloomu.edu), Dept of Mathematics, Bloomsburg University,
Bloomsburg, PA 17815. A digit-product function with interesting properties. Preliminary report. For any positive integer $n$ (written in base 10), let $f(n)=n+$ (the product of the nonzero digits of $n$ ). Iterating this function from various starting points creates a family of increasing sequences. We will investigate properties of this family of sequences, including some which echo those of the $3 x+1$ problem. (Received October 03, 2000)

