

1086-11-672

Lane E Bloome* (lbloome@millikin.edu), Millikin University, Decatur, IL 62522, **Marcella Noorman** (marcella.noorman@pop.belmont.edu), Belmont University, Nashville, TN 37212, and **Justin Ferguson** (jmfergus@keuka.edu), Keuka College, Keuka Park, NY 14478. *Appending digits to Sierpiński, Riesel and Riesel-Sierpiński numbers.*

In 1960, Sierpiński proved that there are infinitely many odd numbers k such that $k2^n + 1$ is composite for all $n \in \mathbb{N}$. In 2011, Jones and White investigated the effects of appending sequences of digits to the left and to the right of positive integers. Using a technique pioneered by Paul Erdős, we construct arithmetic progressions of Sierpiński numbers (and other numbers with similar properties) that generate sequences of composite numbers upon repeatedly appending digits $d \in \{1, 3, 7, 9\}$ to the right. We also investigate cases in which Sierpiński numbers generate sequences of Sierpiński numbers upon repeated appending of digits. (Received September 10, 2012)