Éric Angelini, Lars Blomberg, Charlie Neder, Rémy Sigrist, and N. J. A. Sloane "Choix de Bruxelles": A New Operation on Positive Integers, Fibonacci Quart. 57 (2019), no. 3, 195–200.

Abstract

The "Choix de Bruxelles" operation replaces a positive integer n by any of the numbers that can be obtained by halving or doubling a substring of the decimal representation of n. For example, 16 can become any of 16, 26, 13, 112, 8, or 32. We investigate the properties of this interesting operation and its iterates.