Fatma Mete (fm95@cornell.edu), Cornell University, ithaca, NY 14850, and Yurekli Osman* (yurekli@ithaca.edu), Ithaca College, ithaca, NY 14850. Digital roots, Vedic multiplication and Fibonacci numbers.
Consider a number n, add the digits of numbers derived from it, and continue the process until the remaining number has only one digit. This single digit result is called the digital root of $n$. In this presentation the connection among the digital root, the Vedic multiplication tables and visual representations of numbers will be discussed. Extending these ideas to Fibonacci numbers and other well known integer sequences give rise to interesting geometrical designs. The geometrical designs are obtained using the computer algebra system Mathematica and the spread sheet program Excel. We will show some of these designs and explain how they are created. (Received September 22, 2009)

