

1086-AB-971      **Richard K Guy\*** ([rkg@cpsc.ucalgary.ca](mailto:rkg@cpsc.ucalgary.ca)), Department of Mathematics and Statistics, The University of Calgary, 2500 University Drive NW, Calgary, Alberta T2N 1N4, Canada. *Reg & Neg.*

The beauty and power of (regular, simple) continued fractions is well-known, but **negative** continued fractions deserve equal time. To find the **neg** of  $x$ , subtract it from its **roof**,  $\hat{x}$ , the least integer strictly greater than  $x$ . When  $x$  is an integer, the roof is higher than the ceiling. Then take the reciprocal of the difference and repeat, keeping a record of the roofs. The first one is the **integer part**; the rest are **partial quotients**. Notice that the process doesn't terminate. We will explore several places where negs do a better job than regs. (Received September 17, 2012)