
PAUL POLLACK, University of Georgia
The popularity of values of Euler's function

For each positive integer m , let $N(m)$ denote the number of ϕ -preimages of m , where ϕ is Euler's totient function. For example, $N(12) = 6$, corresponding to the six preimages 13, 21, 26, 28, 36, and 42. We discuss several statistical questions concerning $N(m)$ — for instance, its average size, its maximal order, and the typical size of $N(\phi(k))$ as k varies.