

1135-O5-3212      **Duff G. Campbell\*** ([campbell@hendrix.edu](mailto:campbell@hendrix.edu)), 1600 Washington Ave., Hendrix College, Conway, AR 72032. *Using projects to teach number theory.*

There seems to be no consensus as to where elementary number theory becomes algebraic number theory. When I teach a first course in number theory, I like to use projects as a way to explore topics that are not ordinarily part of such a course: Bernoulli numbers and polynomials, arithmetic generating functions, the structure of  $(\mathbf{Z}/n\mathbf{Z})^\times$ ,  $p$ -adic numbers, patterns in numerical data, etc. I will give a brief overview of several projects and the inspirations that led to them. (Received September 27, 2017)