1023-N5-1366

Benjamin J. Sinwell (besinwell@yahoo.com), 9872 Hollow Glen Place, Silver Spring, MD 20910, and Bowen Kerins* (BKerins@edc.org), Div. for Mathematics Learning and Teaching, Education Development Center, Inc., 55 Chapel Street, Newton, MA 02458-1060. Developing Mathematics: A Mathematics Content Course for Teachers Resulting In a Proof of the Fundamental Theorem of Algebra.

Developing Mathematics is a problem-based course taught at the Park City Mathematics Institute that develops the habits of mind needed to do mathematics and allows teachers to deeply explore mathematics connected to secondary mathematics and well beyond. It is a course that was born of successful interaction between mathematicians, math educators and teachers. Previous Developing Mathematics courses have dealt with Euclid's algorithm, generating functions, Gaussian integers, and Chebyshev polynomials. We will discuss how this past summer's course used carefully crafted problem sets involving the use of dynamic geometry software to lead teachers to an understanding of a proof of the Fundamental Theorem of Algebra. (Received September 25, 2006)