1067-E1-2179   **Elizabeth A Burroughs*** (`burrough@math.montana.edu`), PO Box 172400, Department of Mathematical Sciences, Bozeman, MT 59717. *Pre-Algebra Connections with the Chinese Remainder Theorem.*

A number theory course is generally required as part of a secondary mathematics teacher preparation program. NCTM's Principles and Standards for School Mathematics calls for instruction enabling students in grades 6–8 to "use factors, multiples, prime factorization, and relatively prime numbers to solve problems," and for students in grades 9–12 to "use number theory arguments to justify relationships involving whole numbers"(NCTM, 2000). The Conference Board of the Mathematical Sciences, in The Mathematical Education of Teachers, calls for prospective middle school teachers to "understand and be able to explain fundamental ideas of number theory as they apply to middle school mathematics" (CBMS, 2001). The Chinese Remainder Theorem is a number theory topic that has connections to the mathematics of a pre-algebra classroom. This paper describes a sequence of problems that can be used in educating pre-service mathematics teachers about the Chinese Remainder Theorem by investigating connections to important ideas in a pre-algebra curriculum. (Received September 22, 2010)