Richard F. Ryan* (rryan@marymountcalifornia.edu), 30800 Palos Verdes Drive East, Rancho Palos Verdes, CA 90275. *A Generalized Fermat Equation with an Emphasis on Non-Primitive Solutions.*

The equation $x^m + y^n = z^r$ is considered under the condition that the given integers values for $m$, $n$, and $r$ are greater than one. Solutions of this equation are given for cases in which gcd$(mn, r) = 1$, gcd$(mr, n) = 1$, or gcd$(nr, m) = 1$. (Received August 12, 2017)