Kenny Smith* (kdsmith106@mail.fresnostate.edu). An Approximation of the Prime Counting Function with an Error Term. Preliminary report.

Using known results of the Riemann Zeta function, \( \zeta(s) \), we approximate the prime counting function with a remainder term. The proof is dependent on showing \( \zeta(s) \) has no zero in the region of the complex plane where the real part of \( s \) is greater than or equal to \( 1 - c/\log t \) for a positive constant \( c \). (Received August 27, 2018)