

1086-49-1528 **Asen L Dontchev*** (ald@ams.org). *Dennis-Moré theorem revisited.*

We present several generalizations of the Dennis-Moré theorem characterizing superlinear convergence of quasi-Newton methods. Our first characterization does not impose differentiability and employs instead strong metric subregularity of the function involved. Then we give a Dennis-Moré theorem for nonsmooth functions. Finally, we present a Dennis-Moré theorem for generalized equations. (Received September 23, 2012)