In this report I present findings from a large, national study focused on Calculus I instruction. Graduate student Teaching Assistants (GTAs) contribute to Calculus I instruction in two ways: as the primary teacher and as recitation leaders. As teachers, GTAs are completely in charge of the course just as a lecturer or tenured track/tenured faculty would be, although they lack the experience, education, or time commitment of their faculty counterparts. In this study, I investigate how GTAs compare to tenure track/tenured faculty, and other full/part time faculty on their (a) beliefs about mathematics; (b) instructional practices; and (c) students’ success in Calculus I. Findings from this report point clearly to a need to prepare GTAs adequately for the teaching of calculus but also for further examination of the nature and implications of the differences between GTA and other instructor types’ beliefs about teaching and teaching practices. (Received August 26, 2013)