International mathematics teaching assistants (MTAs) and U.S. domestic MTAs are an indispensable part of mathematics departments regarding teaching a substantial portion of undergraduate students. Because MTAs’ beliefs are significant roles for their teaching practices, this study examines the contrast between international and U.S. domestic MTAs’ beliefs and teaching practices. This research aimed to answer the following questions: 1) What are the differences in beliefs and teaching practices between international and U.S. domestic MTAs? and 2) How are MTAs’ different teaching practices shaped by their beliefs? The goals of this study help us understand the differences between international and U.S. domestic MTAs’ beliefs and teaching practices. The results indicate significant differences in beliefs and teaching practices between the two groups centered on how they taught students to understand definitions and problems and how they motivated students to learn mathematics. The findings also described the relationship between MTAs’ beliefs and teaching practices. (Received September 19, 2010)