Gizem Karaali\* (gizem.karaali@pomona.edu), Department of Mathematics, Pomona College, 610 N. College Avenue, Claremont, CA 91711. A Taxonomic Analysis of Standard Calculus Tasks:

Bloom in Calculus Education. Preliminary report.

In education theory, Bloom's taxonomy (1956) is a well-known paradigm to describe and classify domains of learning and levels of cognitive competency. A simple overview of these levels allows one to see that in most introductory (and even upper division) mathematics courses, the standard exercises given to students in homework sets and in examinations are typically limited to lower levels of this categorization. In this note we propose a framework to assess mathematics test problems and their place within Bloom's taxonomy. Using this framework we present a taxonomic investigation of the exercises from several chapters of a mainstream calculus text and show that most of them do not address Bloom's higher levels. (Received August 16, 2009)