Paulina Chin* (pchin@maplesoft.com), 615 Kumpf Drive, Waterloo, Ontario N2L6N4, Canada, and Louise Krmpotic (louisek@maplesoft.com), 615 Kumpf Drive, Waterloo, Ontario N2L6N4, Canada. Automated Grading of Sketched Graphs in Introductory Calculus Courses. Preliminary report.

Automated grading of mathematics is being used widely. However, the assessment of questions involving sketched graphs still poses many challenges for the designers and users of such software. Apart from determining a reasonable numeric grade, we also wish to provide useful interactive visual feedback to the student when the work is being done for practice and self-assessment. The goal is to allow flexibility in the creation of the question and in the student’s input methods.

In this talk, we will discuss our experiences with automated tools for the assessment of sketched graphs in first-year calculus courses. We will show strategies used and pitfalls encountered in our work on automated graph grading in the Maple package, as well as describe the experiences as conveyed to us of educators who have been using these tools. (Received September 22, 2017)