

1135-K5-2755 **D Brian Walton*** (waltondb@jmu.edu), Roop Hall, MSC 1911, 60 Bluestone Dr, Harrisonburg, VA 22807. *Web-based apps for practicing algebra and calculus skills.*

Web-based apps for practicing algebra and calculus skills provide a tool with which learners can progress through a collection of problems of varying difficulty while receiving instant feedback. An underlying algebra engine was written in Javascript to enable parsing and evaluation of algebraic expressions for numerical rather than symbolic comparison of expressions. Randomly generated problems are created based on a user-selected difficulty level. Examples include algebraic factoring, function composition, differentiation and antidifferentiation, and evaluation of limits. Work in progress includes defining problems for live exercises in online texts authored using the PreTeXt. (Received September 26, 2017)