1003-R1-191 **Kevin E. Charlwood*** (`kevin.charlwood@washburn.edu`), 1700 SW College Avenue, Washburn University, Topeka, KS 66621, Topeka, KS 66621. *Three Interesting Calculus Challenges.* Preliminary report.

We shall present three challenges from the three-semester calculus sequence that are not standard fare in most calculus texts. One deals with finding/classifying the discontinuities of tan(2x)/tan(3x), a second, the integral of ln(x)cos(ln(x)), and the third has students minimize the distance between two non-intersecting plane curves. Discussion will center on the pedagogical value of these problems as part of assignments or test questions in a traditional calculus course. (Received August 23, 2004)