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Matthew E Horak* (horakm@uwstout.edu), Department of Math. Stat. and CS, University of Wisconsin-Stout, Menomonie, WI 54751, and **Melanie Stein** and **Jennifer Taback**. *Length and convexity in Thompson's group F* .

Methods for calculating the word length of elements in Thompson's group F with respect to the standard generating set $\{x_0, x_1\}$ are well known. We introduce a method for calculating word length with respect to "consecutive" generating sets of the form $\{x_0, x_1, x_2, \dots, x_n\}$ that are subsets of the standard infinite generating set, $\{x_0, x_1, \dots\}$. Using this method for calculating length, we show that F is not minimally almost convex with respect to any consecutive generating set. A corollary to this result is that F is not almost convex with respect to any generating set that is a subset of the standard infinite generating set. (Received January 31, 2008)