1125-VW-1988 **R. Daniel Hurwitz*** (dhurwitz@skidmore.edu), Department of Mathematics, Skidmore College, 815 North Broadway, Saratoga Springs, NY 12866-1632. *Subtraction Squares.* Preliminary report.

The title refers to the following iterated process: taking four numbers and regarding them as labels of a square, let the absolute values of the differences between adjacent labels create a new set of labels for a square. Repeat the procedure. Using positive integers, this is sometimes used as a mechanism to practice subtraction in elementary schools. But there are numerous interesting mathematical questions which arise from the process. Among them are: Do the squares "stabilize"? If so, after how many iterations? If not, for which type of initial labels? And what about "subtraction n-gons" for n greater than four? We will consider these and perhaps other issues. (Received September 19, 2016)