1003-D1-575   **Alan Levine*** (`alevine@fandm.edu`), Department of Mahematics, Franklin and Marshall College, Lancaster, PA 17604. *One, Two, Three. . .Jump: An analysis of the long jump.*

In the long jump and other field events, athletes are given a finite number, typically 3 - 5, of attempts. They are ranked according to the best of the attempts. In this paper, we'll construct a model for the length of a jump and use that to determine the distribution, mean and variance of the longest jump. Then we'll consider the effect of fouled attempts (which are considered to be of length 0) on the distribution. Finally, we'll look at other scoring methods, such as adding (or averaging) the lengths of the three jumps. (Received September 23, 2004)