1046-L1-891   **Donald E. Hooley*** (`hooleyd@bluffton.edu`), Mathematics Department, Bluffton University, Bluffton, OH 45817. *Elementary Farkle Strategy: Have You Farkled Lately?*

Farkle is played by throwing six dice, retaining scoring dice and then choosing whether or not to throw the remaining dice. If no points are scored on a throw the player is said to "farkle" and loses all points accumulated on that turn. We illustrate calculation of average scores and the probability of farkling on a given throw, questions appropriate for undergraduates in introductory probability and programming courses. Then we investigate a possible model for an elementary playing strategy optimizing turn score and indicate directions for additional student study. In addition, we present suggestions for computer simulation modeling the multi-step playing process and examples of preliminary results. (Received September 12, 2008)