

1173-05-146

Tara C Davis* (tdavis@hpu.edu), 500 Ala Moana Blvd., WP 4-200-Q, Honolulu, HI 96813, and
Roberto C Soto (rcsoto@fullerton.edu). *Peg Solitaire in Multiple Colors on Graphs*.

Peg solitaire is a popular one person board game that has been played in many countries on various board shapes. Recently, peg solitaire has been studied extensively in two colors on mathematical graphs. We will present our rules for multiple color peg solitaire on graphs. We will present some student and faculty results classifying the solvability of the game on several graceful graphs, as well as discuss open questions. We will also reflect on our experiences as faculty members mentoring undergraduate student researchers. (Received September 19, 2021)