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Peg solitaire is a classical one-person game that has been played in various countries on different types of boards. Numerous studies have focused on the solvability of the games on these traditional boards and more recently in two colors on mathematical graphs. In this presentation, we go beyond traditional peg solitaire and explore the solvability on graphs with multiple colored pegs and arrive at results that differ from previous works on the subject. The paper focuses on classifying the solvability of peg solitaire in n colors on several different types of common mathematical graphs, including the path, cycle, and complete bipartite graphs. (Received August 21, 2019)