ABSTRACT

TITLE:	An Analysis of Attainable Patterns in Alien Tiles
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ABSTRACT: Alien Tiles is a puzzle solving game played online in which the player creates colorful patterns in a grid. By clicking a square in the grid, each square in the chosen row and column changes colors. The objective is to transform the starting board of all red tiles to a given pre-established pattern. This project will analyze the paper by Peter Maier and Werner Nickel, "Attainable Patterns in Alien Tiles." Specifically, we determine whether or not a pattern can be created, and give an algorithm for finding a series of clicks that creates the pattern. Next, a method is introduced which calculates the number of all possible attainable patterns on a playing board of any size.