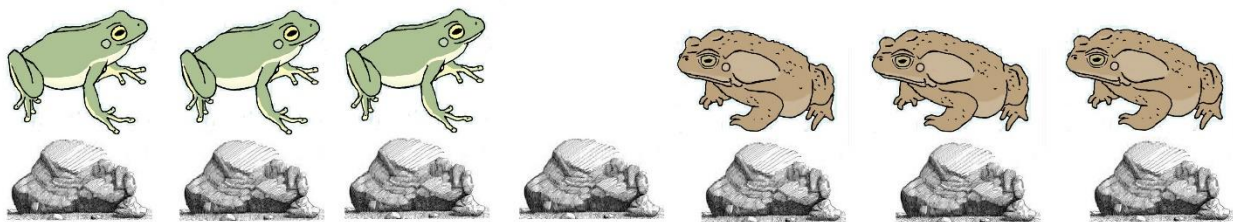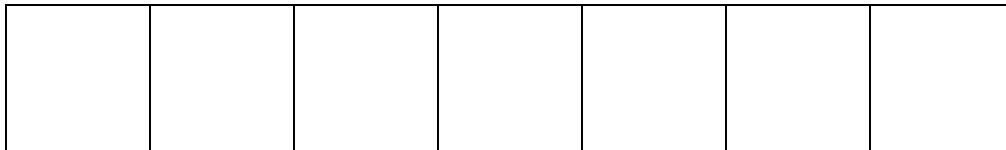# Toads and Frogs
November 19, 2016
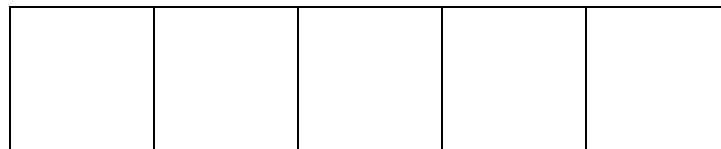
1. There are three frogs and three toads resting on rocks. The toads and the frogs would like to exchange places, but they must follow two rules.
   a. They can only move forward.
   b. They can move to an empty rock immediately in front or jump over at most one other amphibian to reach an empty rock.

You may want to let the 1 x 7 grid below represent the rocks. Use pennies to represent the amphibians (one side for toads and the other for frogs).

2. If that turns out to be too hard, try two frogs and two toads on five rocks.

3. Or even one frog and one toad on three rocks.

4. In each case, what is the minimum number of moves it takes to complete the task? What's the strategy?