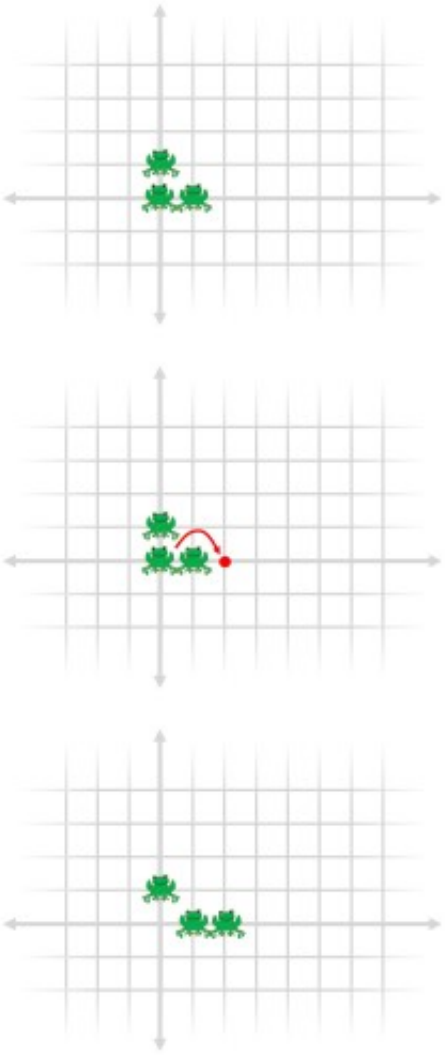
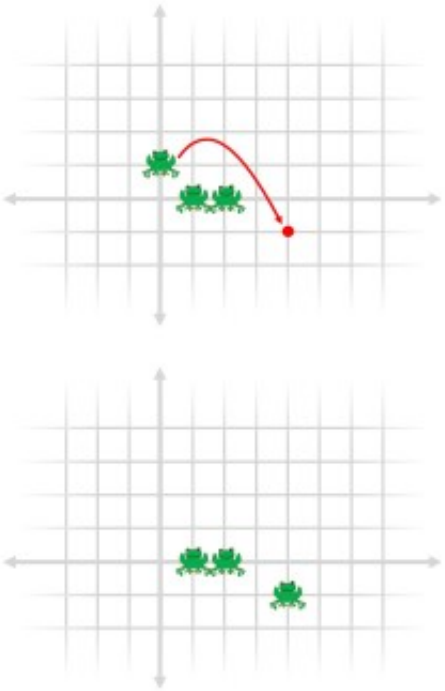
Leapfrog

go figure

Three frogs are sitting on the coordinate plane: one at (0, 0), one at (1, 0), and one at (0, 1). They play a game of leapfrog such that whenever one frog hops over another, the leapee is at the midpoint of where the leaper leaped from and where the leaper landed. For example, here are two valid leaps in the game: (0, 0) to (2, 0) and then (0, 1) to (4, -1).



http://gofiguremath.org/2016/03/19/leapfrog/



Is there a sequence of leaps that lets a frog land at (1, 1)?