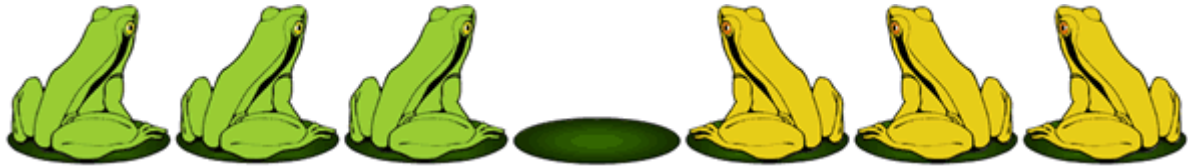


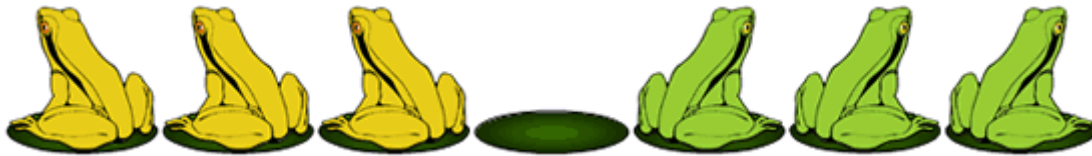
The Other Lilly Pad Is Always Greener

Frogs have a saying: "The Other Lilly Pad Is Always Greener". Some green and yellow frogs were arguing about this until they agreed that they should switch Lilly Pads.



- The green frogs can only be moved to the left and the yellow frogs can only be moved to the right.
- A frog can jump onto an empty Lilly Pad if it is beside it.
- A frog can also jump over a different coloured frog as long as there is an empty Lilly Pad to land on.
- A frog cannot jump over two or more frogs.

Can the frogs switch Lilly Pads?



Extensions:

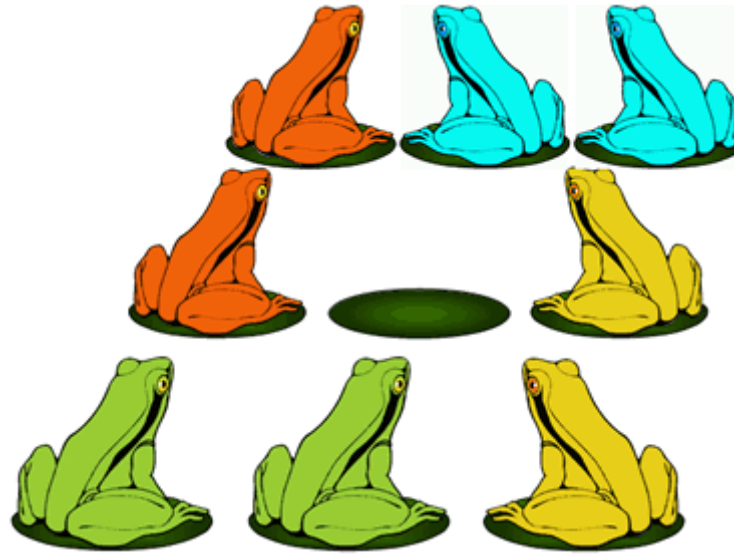
How many ways are there for the frogs to do this?

How many moves does it take?

What if there were a different number of frogs?

Can you find the formula?

Is it possible for all the frogs in the 3 by 3 square below to move to a different Lilly Pad? Frogs can only jump or move horizontally or diagonally. Again frogs can jump over at most one frog of a different colour and only if there is a free Lilly Pad to land on.



Create your own problem.

Credits:

This is a classic problem.

The last extension is by Gord! © 2005 Galileo