



Problem of the Week

Problem C

Just Keep Hopping

In a computer game, a frog jumps along a row of lily pads. There are ten lily pads in the row, numbered from 1 to 10 starting on the left.



From any lily pad the frog can jump either two lily pads right or three lily pads left, as long as it lands on one of the ten lily pads.

For example from lily pad 8, the frog can jump either three lily pads left to pad 5, or two lily pads right to pad 10. However, from lily pad 2, the frog can only jump two lily pads right to pad 4 because jumping three lily pads left would take it past pad 1 so there would be no lily pad to land on.

If the frog starts on lily pad 1 and visits every lily pad exactly once, what is the number on the last lily pad it lands on?

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This problem was inspired by a past [Beaver Computing Challenge \(BCC\)](#) problem.