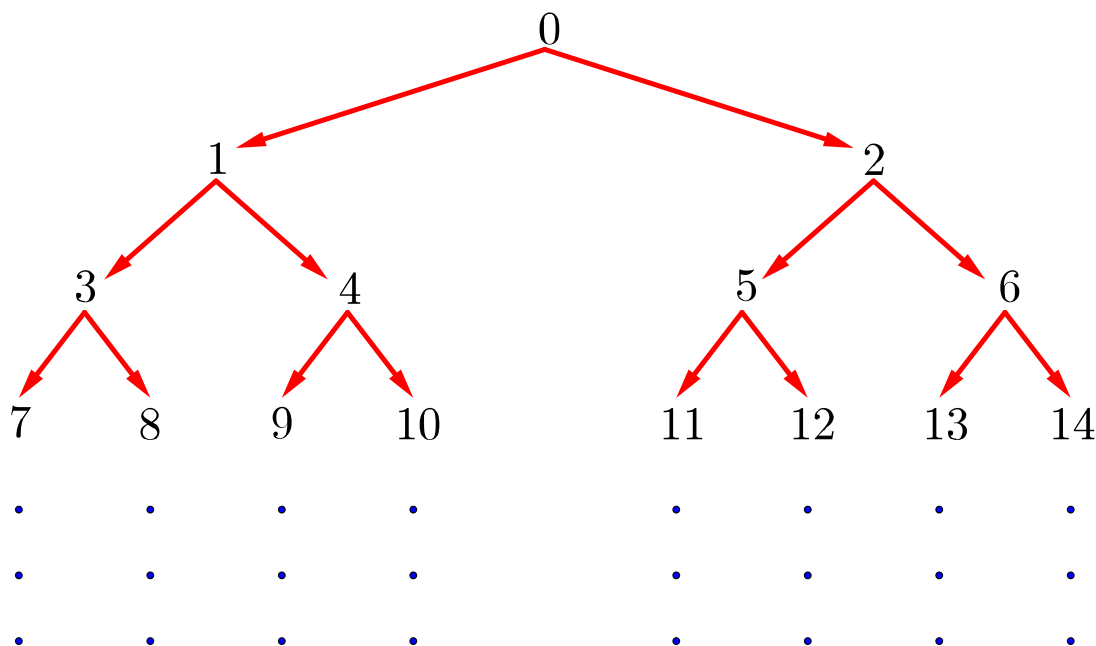


Problem of the Week

Problem E

How Did I Get Here?

Your friend writes down all of the integers starting from 0 in the following way:



Specifically, below every number there are two numbers: one on the left and one on the right. For example, below 3, the number 7 is on the left, and the number 8 is on the right. The numbers can be read in increasing order from top row to bottom row and from left-to-right within a row. Notice that we can get from 0 to 12 by going right (R), left (L) then right (R).

What is the sequence of left (L) and right (R) movements to get to the number 1000 in the tree?

