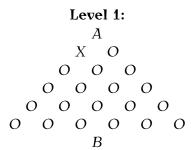
12 Days of ChrisMATH — Day 9

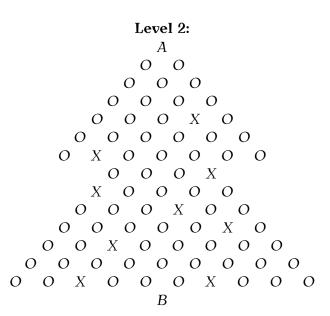
A squirrel is making its way down a tree, starting at, A, the angel at the top of the tree and ending at, B, the bottom of the tree. Each time it moves down a level, it can either go left or right, provided that it moves to an open spot represented by O, or finishes its path by moving to B. It is not allowed to move to the spots marked with X. How many different ways can the squirrel make its way from A to B?

For example, consider the following tree:



Then the squirrel could have travelled LRRL, RLRL, or RRLL, so 3 ways.





Level 3: \boldsymbol{A} 0 0 0 0 0 O X O O0 0 0 0 0 0 0 0 0 0 0 O O O O X O O $O \quad O \quad O \quad X \quad O \quad O \quad O$ O O X O O O O O0 0 0 0 0 0 O O O O X OO O O O O X O $O \quad O \quad O \quad O \quad O \quad X \quad O \quad O \quad O$ O O X O O O O O X OO O O O X O O O O O O O X O O O O O O O O O O O X O O O O O O $\begin{smallmatrix} O & O & O & O & X & O & O & O & O & O \\ \end{smallmatrix}$ O O O X O O O O O O O O O X O O O O X O O O O 0 0 0 0 0 0 0 0 0 X 0 0 0 O O O X O O O O O O O O O O O X O O O O O O X O O O O B