Problem of the Week
Problem C
Filtering Up

In the following grid, a number in any square above the bottom row is obtained by adding the numbers connected to it from the row below. For example, the 5 in the second last row is obtained by adding the numbers connected to it in the row below, 2 and 3. The numbers filter up until reaching the final square containing \(2x\). That is, the number in the top square is two times the unknown number in the bottom row.

Determine the value of \(x\).