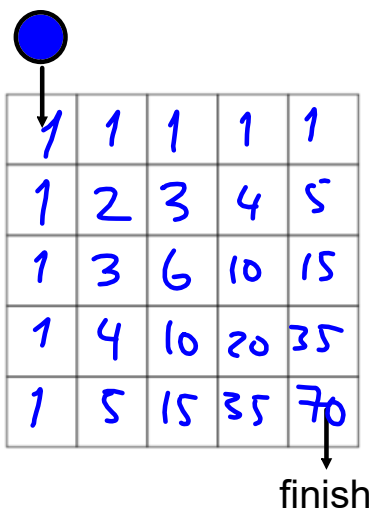


Applying Pascal's Method

Feb 13/2020

How many paths can the coin be moved from the top-left to the bottom-right, by **only moving down or right**?



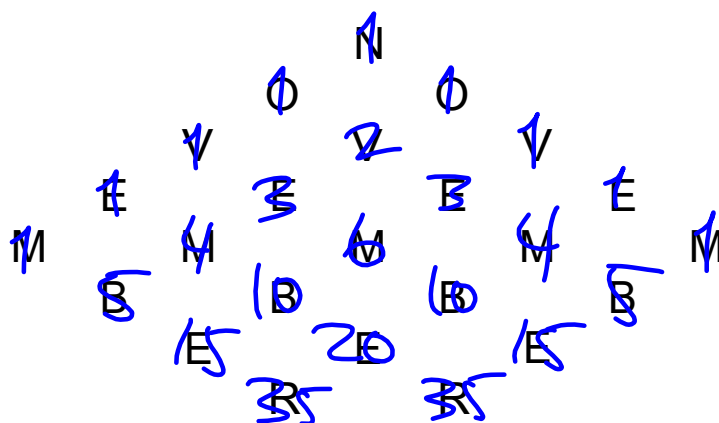
1	1	1	1	1
1	2	3	4	5
1	3	6	10	15
1	4	10	20	35
1	5	15	35	70

finish

$\therefore$  there are  
70 possible paths.

Jan 9-1:46 PM

Ex. Use Pascal's method to determine how many paths spell "NOVEMBER", starting at the top and always moving down to the left or right.



$\therefore$  70 ways to spell the word.

Oct 2-9:47 PM

Ex. The red checker can only travel diagonally upward.  
How many paths to the top (a) with no restrictions?



$$\begin{aligned}\# \text{ paths} &= 6 + 2(14) \\ &= 34\end{aligned}$$

Oct 2-9:58 PM

Ex. The red checker can only travel diagonally upward.  
How many paths to the top (b) blocked by red?



18 paths

Oct 2-9:58 PM

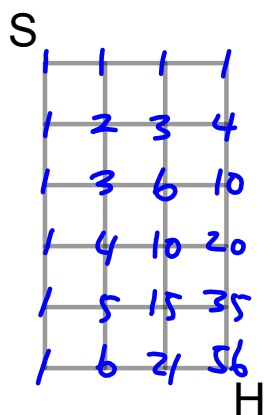
Ex. The red checker can only travel diagonally upward. How many paths to the top (c) jumping over black?



26 ways

Oct 2-9:58 PM

Ex. School is 5 blocks north and 3 west from home. How many paths from home to school, assuming only up and left are valid directions?



$\therefore$  there are 56 paths.

Oct 2-10:00 PM

Assigned Work:

p.256 # 2, 3, 4, 7a, 11, 14

3.  $\begin{matrix} & & 1 & & 15 & & 105 \\ & & \swarrow & & \downarrow & & \searrow \\ 1 & 16 & 120 & 560 & 1820 & 4368 & 8008 & 11440 & 12870 \end{matrix}$

$\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

4. (a)  $\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

(c)  $\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

Oct 2-10:04 PM

7(a)  $\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

11.  $\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

to hit \$5000,  
slot 3 or 4

$\begin{matrix} & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \end{matrix}$

Feb 14-12:51 PM