

The Story Chapter 24
No Ordinary Man

In how many ways can JESUS CHRIST be spelled going from one letter to an adjacent letter in the array below?

J
E E
S S S
U U U U
S S S S S
C C C C C C
H H H H H
R R R R
I I I
S S
T

Answer

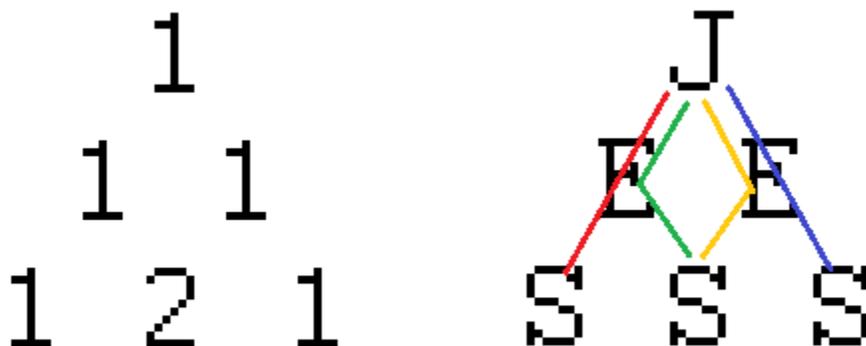
There are 252 ways that you can spell JESUS CHRIST in the array of letters above.

The best way to see this is using a modification of Pascal's Triangle.

To build the triangle, start with "1" at the top, then continue placing numbers below it in a triangular pattern.

Each number is just the two numbers above it added together. Each number represents the number of ways that you can get to that letter from the top.

For example, just looking at the top three lines of the triangle, there are four ways to spell JES: One of them ends up on the first S in the third row (represented by a 1), two of them wind up on the second S in the row (represented by a 2), and one of the ways ends up on the third S in the row (also represented by a 1).



So, the first three letters can be spelled in four ways, shown by the red, green, yellow, and blue paths.

