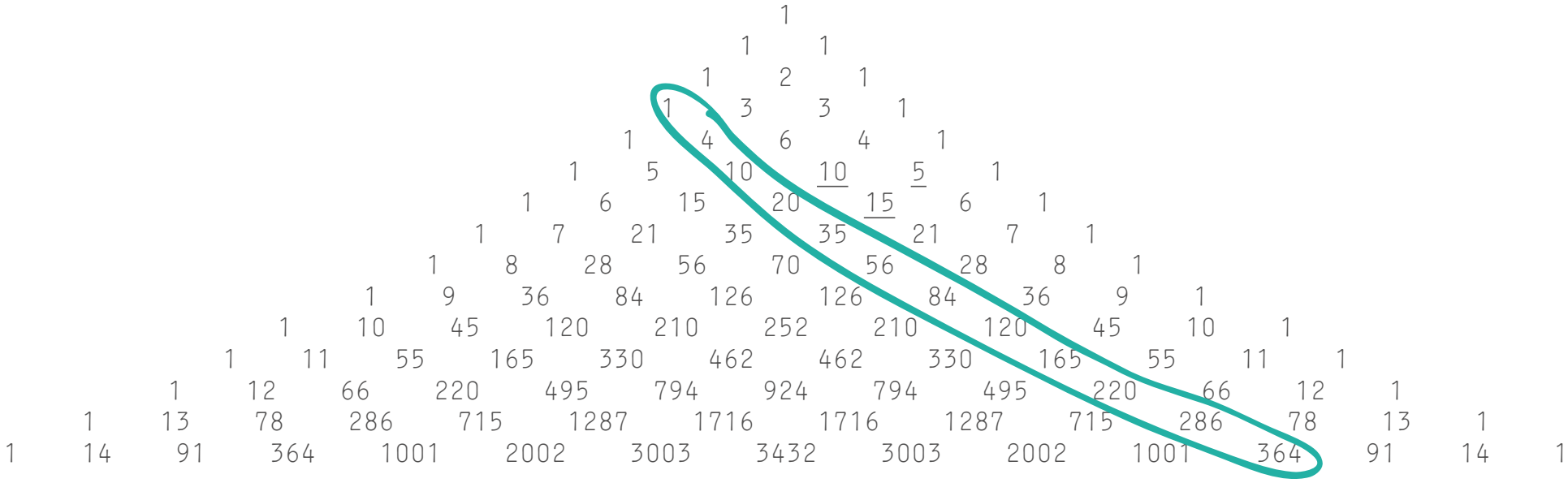
Pascal's Triangle

Pascal, a famous French mathematician in the mid-1660's—investigated this ancient Chinese pattern. You get numbers in each row by adding the two numbers that are above and diagonal to it. For example the underlined 15 is found by adding the underlined 10 and the underlined 5. This is done to create the entire triangle.

When you look on the diagonal from the starting point far most left number and four rows down. These numbers represent the totals of each day plus all of the previous days totals. Take the first two for example. 1 is the partridge on the first day. 4 is the partridge on the first day plus the partridge on the second day plus the two turtle doves on the second day. Following the pattern to 10, 20, 35, 56, 84, 120, 165, 220, 286, and finally 364—that are the total after each of the twelve days!