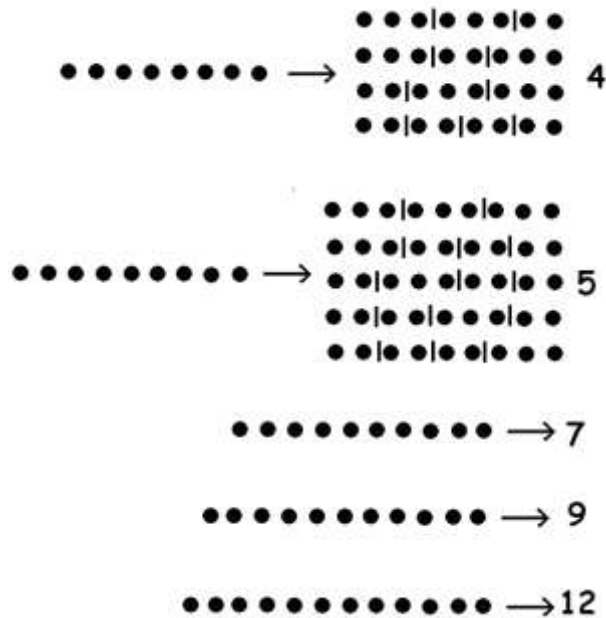# WITHOUT WORDS

Mathematical Puzzles to Confound and Delight

WW 26: SOLUTION

We are counting the number of ways to set a given row of dots into groups of two and three.

We see the sequence of counts $1, 1, 1, 2, 2, 3, 4, 5, 7, 9, 12, 16, 21, 28,\ldots$ with each number in the sequence beyond the third the sum of the numbers two and three places back. (For example, $4+5=9$, $5+7=12$, and $7+9=16$.)

This makes sense. To divide a row of dots into groups of two and three, either start with a group of two and solve the puzzle on the remaining dots (which is the puzzle "two places back") or start with group of three and solve the puzzle on the remaining dots (which is the puzzle "three places back").