



DISCOVER NUMBER PATTERNS

FIBONACCI NUMBERS

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...

Fibonacci numbers are the terms in the Fibonacci sequence.

Start with 0 and 1. Each subsequent term is the sum of the previous two terms.

0 + 1 = 1 **1 + 1 = 2** **1 + 2 = 3** **2 + 3 = 5**

Keep going: 3 + 5 = 8, then 5 + 8 = 13, then 8 + 13 = 21.

THE FIRST 20 TERMS

Read across the first row, then the second.

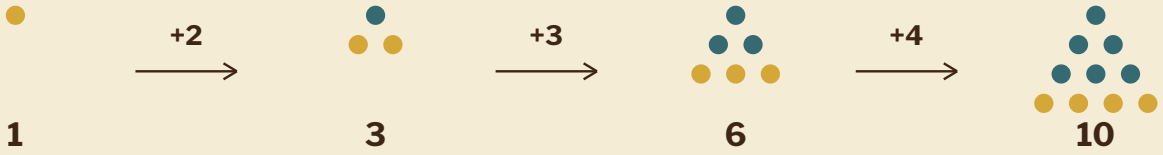
0	1	1	2	3	5	8	13	21	34
55	89	144	233	377	610	987	1597	2584	4181

Notice the two 1s: 0 + 1 gives the second 1.

Some lists begin 1, 1, 2, 3, ... and leave out the initial 0.

TRIANGULAR NUMBERS

Triangular numbers count dots arranged in a triangle.
Start with 1. Add 2, then 3, then 4, and so on.



Each new bottom row adds one more dot than the row before.

FOR n ROWS

Triangular number = $\frac{n(n+1)}{2}$

6 rows: 1 + 2 + 3 + 4 + 5 + 6

$\frac{6 \times 7}{2} = 21$

THE FIRST 20 POSITIVE TRIANGULAR NUMBERS

Read across the first row, then the second.

1	3	6	10	15	21	28	36	45	55
66	78	91	105	120	136	153	171	190	210

NEXT STEP: After 21, add 7 to get 28.