



STICKY TRIANGLES

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We are investigating how many small triangles to make a big triangle, and how many lolly sticks make a small triangle.

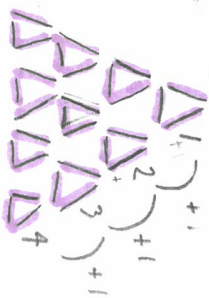
We collected results by looking at the individual triangles and how many more were being added every new row which led us to the conclusion that every new row had one more triangle than the one before.

Our results:

This sequence is **quadratic** because the sequence of triangle numbers is quadratic, so if you times the sequence by 3, it stays quadratic.

Rows	lolly sticks	Triangles
1	3	1
2	9	3
3	18	6
4	30	10

triangle numbers x 3



We discovered that the pattern was the triangle numbers x 3 for the lolly sticks.

formula for triangle numbers

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

numbers of rows.

If you don't divide it by 2 then the answers of lolly sticks would be four times as many.