

Polygon numbers

Triangle numbers

Draw 1 dot, then a row of 2 dots next to it, and so on...



You draw 1 dot on the first go, 3 on the second, 6 on the third.

How many dots do you draw on the n^{th} go?

Square numbers

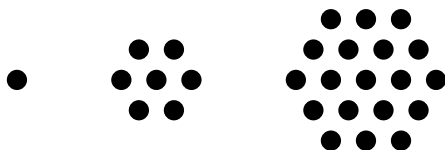
How many dots are there in an $n \times n$ square of dots?



Is there a link with the triangle numbers? Why?

Hexagon numbers

Draw a dot then surround it with 6 evenly spaced dots. Keep adding more layers of dots.



How many dots in the third picture? In the n^{th} ?

Is there a link with the triangle or square numbers?