NRich-Sticky Triangle Ethan Luo

Question 1

Answer: The first pattern is a pattern to find the number of small triangles in each row, you need to multiply the number of rows by 2 and subtract the product by 1. The second pattern is also a pattern to find the number of Triangles in the whole pile, you need to use the number of rows and multiply it by itself. For sticks this is the formula: n times 3 + previous number (n depends on the number of rows you have)

Question 2

Answer: the pattern will carry on with numbers that relate with the first answer.

Question 3

Answer: this pattern occurs because it is like ten pin bowling, you must put 1 triangle in the front and work your way up by adding 1 triangle to the previous number of triangles each time. You must put put them behind the triangle(s) in front of them.

Question 4

Answer: Yes because there will always be more triangles to add and the number you can put is infinite.