Making triangle patterns II

This task is about growing patterns with shapes.

Practical task

a) Use sticks to continue the pattern below. Stop when you have made 5 rows of the pattern. Draw each pattern row in the spaces provided.

Pattern row 1 Pattern row 2 Pattern row 3 Pattern row 4

Pattern row 5

Have your pattern checked by your teacher.

b) Use your drawings in a) to complete the table below.

ONLY COUNT TRIANGLES THAT POINT UP \triangle , DO NOT COUNT THE TRIANGLES THAT POINT DOWN ∇ .

Number of row(s)	1	2	3	4	5
i) Number of triangles \triangle	1	3			
ii) Number of sticks used	3	9			

Have your table checked by your teacher.

c) Use your table to help answer the following question. How many sticks in total would you need to have 36 triangles (\triangle) in your pattern?