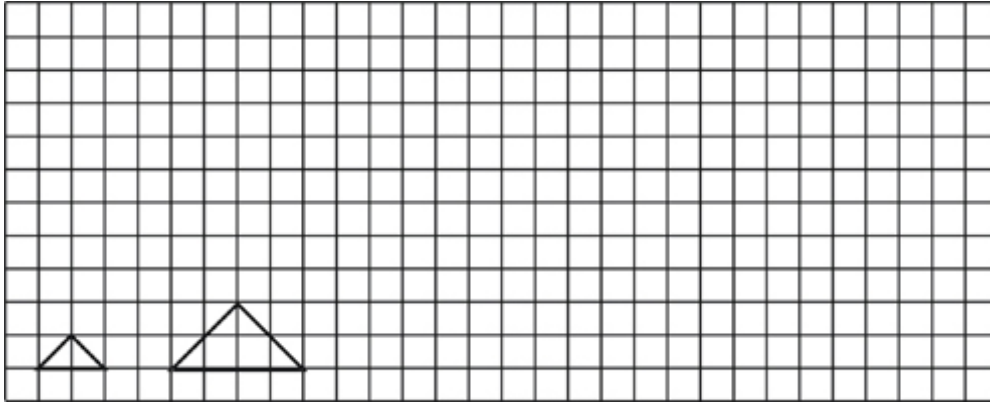# Grid triangles

This task is about continuing a pattern of triangles, and finding a rule.

a) On the grid of squares above, draw the next 2 shapes in this series of triangles.

b) Complete this table, giving the area of each triangle:

Height of triangle (number of squares high)	1	2	3	4
Number of squares in the triangle (area)	1	4		

c) How many squares will be in a triangle of height ...

   i) 10 squares? _____ squares

   ii) 20 squares? _____ squares

d) Explain or write a rule that describes how to work out the total number of squares (area) needed for any given height of triangle.

_____

_____

e) Show how to work out the height of a triangle that has 81 squares in it.

Height = _____ squares