Counting Triangles

Problem

Determine how many total triangles there are in the figure below. Then determine how many there would be if the figure had n rows instead of six.

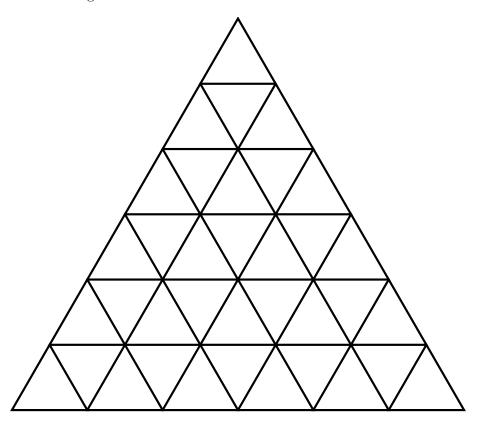


Figure 1: Counting Triangles