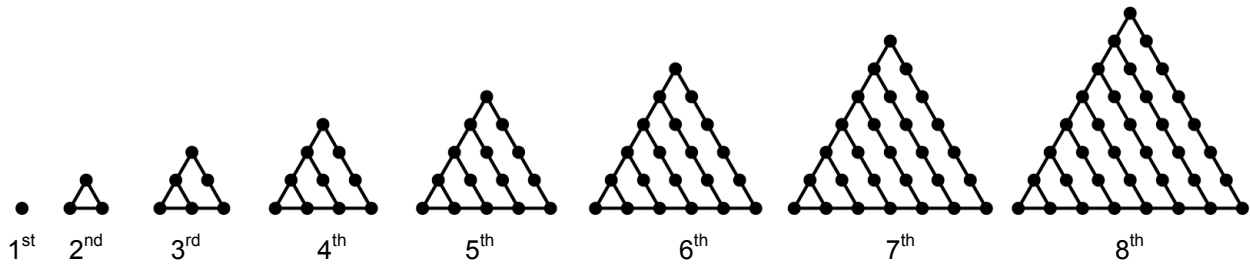# Triangular Numbers

A **triangular number** is the **total number** of dots in an equilateral triangle evenly filled with dots. The first several triangular number arrays are shown below.

1ˢᵗ   2ⁿᵈ   3ʳᵈ   4ᵗʰ   5ᵗʰ   6ᵗʰ   7ᵗʰ   8ᵗʰ

If you were to continue this pattern, can you predict how many dots will be in the 50th triangular number?   How about in the 100th triangular number?

Complete the following table for **Triangular Numbers**, expressing a rule for the nth triangular number on the last line.

Number of dots on one side of array, n	Total number of dots, T
1	
2	
3	
4	
5	
6	
7	
8	
9	
50	
100	
n	