## MATH 290-NUMBER THEORY FOR TEACHERS PROBLEM OF THE DAY #23 DUE FRIDAY, APRIL 11, 2014

1. A triangular number is a number that counts objects that can be arranged into an equilateral triangle. For example, the diagram below shows that the first triangular number is 1, the second triangular number is 3, the third triangular number is 6, and the fourth triangular number is 10. Can you find the fifth, sixth and seventh triangular numbers? The 10th? The nth?