

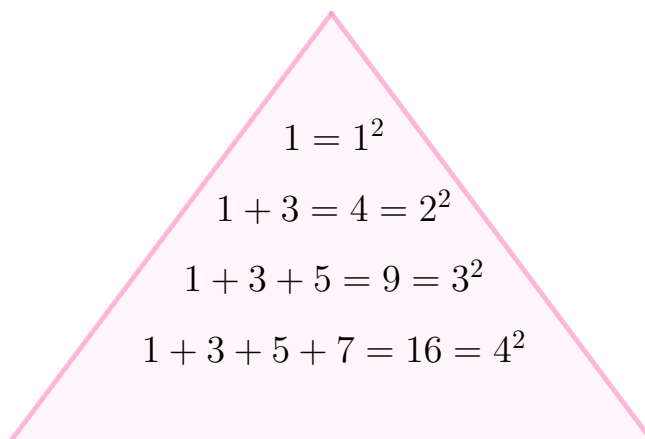


Problem of the Week

Problem C

A Formula for That

Did you know that the sum of the first n positive odd integers is $n \times n$ or n^2 ? The following diagram illustrates the first four possible sums.



The sum of the first five positive odd integers should be 5^2 or 25. We can easily check to see that $1 + 3 + 5 + 7 + 9 = 25$. We have not proven this result but it will be useful in the following problem.

When adding the first a positive odd integers to the first b positive odd integers, the sum is 180. If p is the largest odd number in the first set of numbers and q is the largest odd number in the second set of numbers, then determine the sum $p + q$.

