Problem of the Week

Problem D

Add On!

When sixty *consecutive odd* integers are added together, their sum is 4800.

Determine the largest of the sixty integers.

NOTE:

In solving the above problem, it may be helpful to use the fact that the sum of the first n positive integers is equal to $\frac{n(n+1)}{2}$. That is,

$$1 + 2 + 3 + \ldots + n = \frac{n(n+1)}{2}$$

For example, $1 + 2 + 3 + 4 + 5 = 15$, and $\frac{5(6)}{2} = 15$.

Also, $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36$, and $\frac{8(9)}{2} = 36$.