



Problem of the Week

Problem C

A Grand Sum

Did you know that 1000 can be written as the sum of the 5 consecutive positive integers beginning with 198? That is,

$$1000 = 198 + 199 + 200 + 201 + 202$$

Also, 1000 can be written as the sum of 16 consecutive positive integers beginning with 55. That is,

$$1000 = 55 + 56 + 57 + 58 + 59 + 60 + 61 + 62 + 63 + 64 + 65 + 66 + 67 + 68 + 69 + 70$$

It is also possible to write 1000 as a sum of 25 consecutive positive integers. This is the maximum number of consecutive positive integers that could be used to create the sum. Determine the smallest of the positive integers in this sum.

1000