Problem of the Week

Problem C

Add 'em Up

Did you know that 1000 can be written as the sum of 16 consecutive integers? That is,

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

The diagram below illustrates a mathematical short form used for writing the above sum. The notation is called *Sigma Notation*.

$$\sum_{i=55}^{70} i = 1000$$

Using at least two numbers, what is the minimum number of consecutive integers needed to sum to exactly 1000?