Problem of the Week

Problem D

1225 is SUMthing Special

Did you know that 1225 can be written as the sum of ten consecutive integers?

That is,

$$1225 = 118 + 119 + 120 + 121 + 122 + 123 + 124 + 125 + 126 + 127$$

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

$$\sum_{i=118}^{127} i = 1225$$

How many ways can the number 1225 be expressed as the sum of an **odd** number of consecutive positive integers?