Problem of the Week Problem E 1225 is Even More Special

Did you know that 1225 can be written as the sum of seven consecutive integers? That is,

$$1225 = 172 + 173 + 174 + 175 + 176 + 177 + 178$$

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

$$\sum_{i=172}^{178} i = 1225$$

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