

Adding a sequence in the form: $1 + 3 + \dots + 2n-1$:

A. A sequence in this form reduces to:

$$\sum_{i=1}^n 2i-1 = 1 + 3 + 5 + \dots + 2n - 1 = (\text{number of terms})^2$$

B. To find the number of terms easily just add 1 to the last number and divide by 2.

Ex [1] $1 + 3 + 5 + \dots + 21 = \underline{\hspace{2cm}}$.

a) Find the number of terms: $(21 + 1) / 2 = 11$.

b) $11^2 = 121$.

c) The answer is 121.

Ex [2] $1 + 3 + 5 + \dots + 205 = \underline{\hspace{2cm}}$.

a) Find the number of terms: $(205 + 1) / 2 = 103$.

b) $103^2 = 10909$. See [Multiplying Numbers Greater Than 100](#).

c) The answer is 10909.