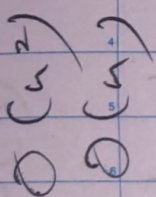


* Valid Triangle Numbers



$(4, 2, 3, 4)$

↓

$(2, 3, 4, 4)$
 $\uparrow \quad \quad \quad \uparrow \quad \quad \quad \uparrow$
 $j \quad \quad \quad k \quad \quad \quad i$

If $i < j + k \rightarrow$ then $k-j$ are there.

else k to left & check increment of j ?