Area+Area

Answer the area of a polygon of n vertices. They will be given in counter-clockwise order, with each vertex being represented by a `(x, y)` coordinate. To make sure the judge will not mess up with floating points variables, answer it multiplied by 2.

Input:

- First line will contain an integer n $(1 <= n <= 10^5)$ - the number of vertices of the polygon.
- Next n lines will contain 2 integers each, x and y $(0 <= x, y <= 10^9)$ - the coordinates of each vertex (sorted in counter-clockwise order).

Output:

- Output a single integer containing $2 * S$, where S is the area of the given polygon (so there is no need to use floating point variables at all). Take care with overflows (e.g. use `long long` in C++).

Samples:

Input	Output
3 0 0 5 0 0 5	25
4 0 0 0 5 5 5 5 0	50
6 1 0 1 4 1 7 3 9 5 7 9 2	84