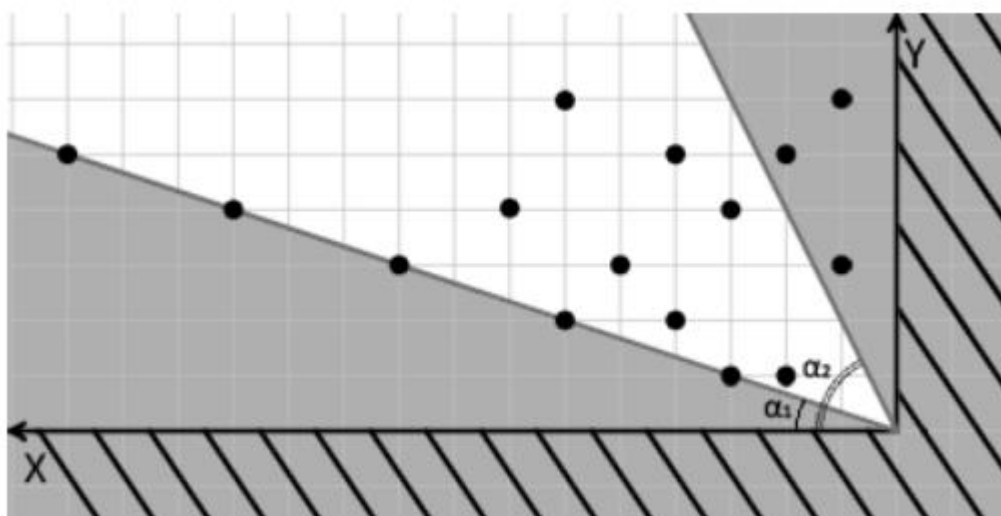


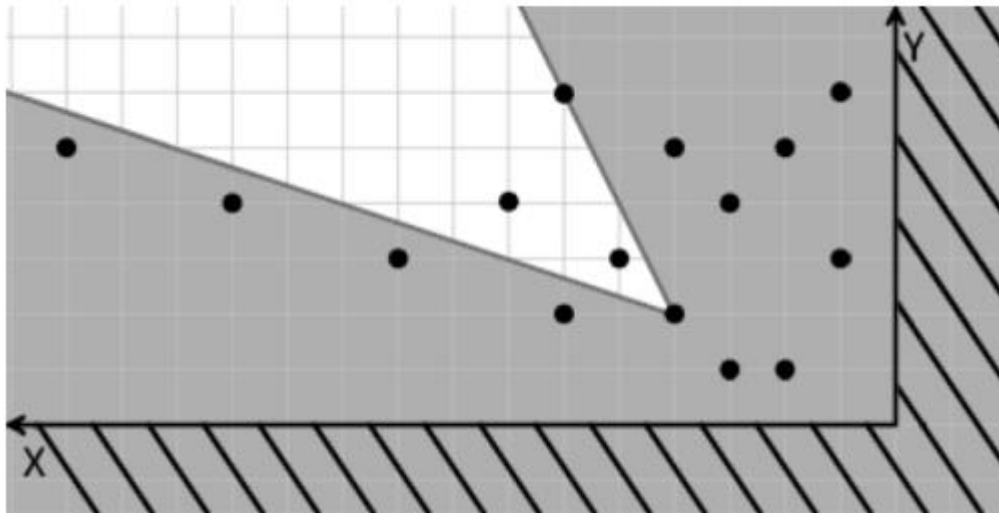
## G – COUNTING STARS

In the evenings, Anh and Tan would enjoy watching the star-filled night sky together. They would sit on the ground, sip some tea and stare at the shining stars in the sky. In the middle of their sight, there is a very tall cone tree that separates the view into two parts, so they consider the tree as a mark: Tom's stars are to the right of the tree and Jerry's stars are to the left. Every night, Anh loves to count his stars, so he knows exactly that there are  $n$  stars on his side (supposed that the number of stars stay the same). This time, he wants to try something new. So, he imagines a coordinate system: he put the origin of the coordinate system at the intersection of the ground and the tree, and he sets the  $Ox$  axis along the ground to the left of the tree and the  $Oy$  axis up along the tree (see figure).

To make things more interesting, Anh imagines two rays emitted from the origin of axes at angles  $\alpha_1$  and  $\alpha_2$  to the  $Ox$  axis.



Now he chooses any star that lies strictly between these rays. Note that he can't choose the stars that lie on the rays. After that, he imagines two more rays that emanate from this star at the same angles  $\alpha_1$  and  $\alpha_2$  to the  $Ox$  axis and chooses another star that lies strictly between the new rays. He repeats the operation as long as there are still stars he can choose between the rays that emanate from the previously chosen star.



As a result, Anh gets a chain of stars. He can consecutively get to each star if he acts by the given rules.

Find the maximum number of stars  $m$  that Anh's chain can contain.

Note that the chain must start from the origin of the coordinate system, that isn't taken into consideration while counting the number  $m$  of stars in the chain.

### INPUT:

- The first line includes an integer  $n$  ( $1 \leq n \leq 10^5$ ) – the number of stars.
- The second line contains simple fractions representing relationships “a/b c/d”, such that  $\frac{a}{b} = \frac{\sin \alpha_1}{\cos \alpha_1}$ ,  $\frac{c}{d} = \frac{\sin \alpha_2}{\cos \alpha_2}$ , ( $0 \leq a, b, c, d \leq 10^5$ ,  $0^\circ \leq \alpha_1 < \alpha_2 \leq 90^\circ$ ,  $\frac{a}{b} \neq \frac{c}{d}$ ). The given numbers  $a, b, c, d$  are integers.
- The next  $n$  lines contain pairs of integers  $x_i, y_i$  ( $1 \leq x_i, y_i \leq 10^5$ ) - the stars' coordinates. It is guaranteed that all stars have distinct coordinates.

## OUTPUT:

Print on one line the integer  $m$  – the maximum number of stars that Jerry's chain can contain.

## EXAMPLE:

Input	Output
15 1/4 2/1 3 1 6 2 9 3 12 4 15 5 2 1 4 2 5 3 7 4 1 3 3 4 2 5 4 5 1 6 6 6	5

In this example, the longest chain that Anh can build consists of four stars.

