As we know, finding a rational close to a given rational is straightforward. The minimal distance between two distinct integers is 1. By contrast, there is no minimal distance between two distinct rationals. A straightforward method for finding a rational close to a given rational a/b is based on the following construction. For every $m > 0$ one has $a/b = (am)/(bm)$, and the neighbors $(am \pm 1)/(bm)$ lie at distance $1/(bm)$ from the given rational. So, by choosing m to be sufficiently large, one can make the distance to be as small as we please.

Given a rational a/b and an upper bound n for the distance, the problem consists to find the rational c/d such that:

(i) $a/b < c/d$;

(ii) the distance between the rationals a/b and c/d is smaller or equal than n;

(iii) the denominator d is as small as possible.

Input

The input will contain several test cases, each of them consisting of two lines.

The first line of the input contains two positive integers a and b which define the rational number a/b. The integers a and b are assumed to be in the interval $[1, 100000]$. The second line contain a positive real number n, $0.00000001 \leq n \leq 0.1$, which gives the maximum distance allowed.

Output

For each test case, write to the output, on a line by itself, the two positive integers c and d which solve the problem.

Sample Input

```
96 145
0.0001
```

Sample Output

```
49 74
```