

A. Soft Drinking

time limit per test: 2 seconds
 memory limit per test: 256 megabytes
 input: standard input
 output: standard output

This winter is so cold in Nvodsk! A group of n friends decided to buy k bottles of a soft drink called "Take-It-Light" to warm up a bit. Each bottle has l milliliters of the drink. Also they bought c limes and cut each of them into d slices. After that they found p grams of salt.

To make a toast, each friend needs nl milliliters of the drink, a slice of lime and np grams of salt. The friends want to make as many toasts as they can, provided they all drink the same amount. How many toasts can each friend make?

Input

The first and only line contains **positive** integers n, k, l, c, d, p, nl, np , not exceeding 1000 and no less than 1. The numbers are separated by exactly one space.

Output

Print a single integer — the number of toasts each friend can make.

Examples

input
3 4 5 10 8 100 3 1
output
2

input
5 100 10 1 19 90 4 3
output
3

input
10 1000 1000 25 23 1 50 1
output
0

Note

A comment to the first sample:

Overall the friends have $4 * 5 = 20$ milliliters of the drink, it is enough to make $20 / 3 = 6$ toasts. The limes are enough for $10 * 8 = 80$ toasts and the salt is enough for $100 / 1 = 100$ toasts. However, there are 3 friends in the group, so the answer is $\min(6, 80, 100) / 3 = 2$.

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #107 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest

→ Problem tags

implementation

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→ Contest materials

- Announcement 
- Tutorial 