Problem

You are given two arrays a_1,a_2,\ldots,a_n and b_1,b_2,\ldots,b_n . In each step, you can set $a_i=a_i-b_i$ if $a_i\geq b_i$. Determine the minimum number of steps that are required to make all a's equal.

Input format

- First line: n
- Second line: a_1, a_2, \ldots, a_n
- Third line: b_1, b_2, \ldots, b_n

Output format

Print the minimum number of steps that are required to make all a's equal. If it is not possible, then print -1.

Constraints

 $0 \le n, a_i, b_i \le 5000$

Sample input

25 64 3

Sample output

-1

Sample Input	Sample Output
5 5 7 10 5 15 2 2 1 3 5	8

Time Limit: 1

Memory Limit: 256

Source Limit: