A. Bicycle Chain

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

Vasya's bicycle chain drive consists of two parts: n stars are attached to the pedal axle, m stars are attached to the rear wheel axle. The chain helps to rotate the rear wheel by transmitting the pedal rotation.

We know that the i-th star on the pedal axle has a_i $(0 < a_1 < a_2 < ... < a_n)$ teeth, and the j-th star on the rear wheel axle has $b_j (0 < b_1 < b_2 < ... < b_m)$ teeth. Any pair (i, j) $(1 \le i \le n; 1 \le j \le m)$ is called a *gear* and sets the indexes of stars to which the chain is currently attached. Gear (i, j) has a gear ratio, equal to the value $\frac{b_j}{a_i}$.

Since Vasya likes integers, he wants to find such gears (i, j), that their ratios are integers. On the other hand, Vasya likes fast driving, so among all "integer" gears (i, j) he wants to choose a gear with the maximum ratio. Help him to find the number of such gears.

In the problem, fraction $\frac{b_j}{a_i}$ denotes division in real numbers, that is, no rounding is performed.

Input

The first input line contains integer n $(1 \le n \le 50)$ — the number of stars on the bicycle's pedal axle. The second line contains n integers $a_1, a_2, ..., a_n$ $(1 \le a_i \le 10^4)$ in the order of strict increasing.

The third input line contains integer m $(1 \le m \le 50)$ — the number of stars on the rear wheel axle. The fourth line contains m integers $b_1, b_2, ..., b_m$ $(1 \le b_i \le 10^4)$ in the order of strict increasing.

It is guaranteed that there exists at least one gear (i, j), that its gear ratio is an integer. The numbers on the lines are separated by spaces.

Output

Print the number of "integer" gears with the maximum ratio among all "integer" gears.

Examples

input

```
2
4 5
3
12 13 15
```

output

```
2
```

input

```
4
1 2 3 4
```

```
5
10 11 12 13 14
```

output

```
1
```

Note

In the first sample the maximum "integer" gear ratio equals 3. There are two gears that have such gear ratio. For one of them $a_1 = 4$, $b_1 = 12$, and for the other $a_2 = 5$, $b_3 = 15$.