Between Two Sets

Consider two sets of positive integers, $A = \{a_0, a_1, \ldots, a_{n-1}\}$ and $B = \{b_0, b_1, \ldots, b_{m-1}\}$. We say that a positive integer, x, is *between* sets A and B if the following conditions are satisfied:

1. All elements in A are factors of x.

2. x is a factor of all elements in B.

Given A and B, find and print the number of integers (i.e., possible x's) that are *between* the two sets.

Input Format

The first line contains two space-separated integers describing the respective values of n (the number of elements in set A) and m (the number of elements in set B).
The second line contains n distinct space-separated integers describing $a_0, a_1, \ldots, a_{n-1}$.
The third line contains m distinct space-separated integers describing $b_0, b_1, \ldots, b_{m-1}$.

Constraints

- $1 \le n, m \le 10$

- $1 \le a_i \le 100$

- $1 \le b_i \le 100$

Output Format

Print the number of integers that are considered to be *between* A and B.

Sample Input

```
2 3
2 4
16 32 96
```

Sample Output

```
3
```

Explanation

The integers that are *between* $A = \{2, 4\}$ and $B = \{16, 32, 96\}$ are 4, 8, and 16.