

## 7176 LCM

You are given two natural numbers  $A$  and  $B$ . Determine the natural number  $N$  such that the least common multiple of the numbers  $A + N$  and  $B + N$  is minimal.

### Input

The input file contains several test cases, each of them as described below.

The only line of the input contains two natural numbers:  $A$  and  $B$ . None of them is exceeding  $10^9$ .

### Output

For each test case, output the natural number  $N$  such that  $LCM(A + N, B + N)$  is minimal. If there are several values of  $N$  which yield the minimum, output the smallest one.

### Sample Input

```
4 10
```

### Sample Output

```
2
```