adun

Ionel received an interesting problem at the maths class. He was given two natural number *X* and *Y* and he has to determine a natural number so that the smallest common multiple of the numbers *X+K* and *Y+K* should be minimum.

Task

Determine the value of *K* so that the smallest common multiple of the numbers *X+K* and *Y+K* should be minimum.

Input data

The standard input contains, on the first line, the natural numbers **X** and **Y** separated by a space.

Output data

The standard output contains, on the first line, the value *K*.

Constraints and specifications

- *X* and *Y* are natural numbers smaller than 1 000 000 001.
- If there are more values *K* for which the smallest common multiple of the numbers *X+K* and *Y+K* is minimum, the minimum value K will be printed.

Example

input	output	explanation
6 14	2	*K=2,* the smallest common multiple is **16**

Execution time: 0.1 s/test

Memory 2 MB.