# B. Fox Dividing Cheese

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

Two little greedy bears have found two pieces of cheese in the forest of weight $a$ and $b$grams, correspondingly. The bears are so greedy that they are ready to fight for the larger piece. That's where the fox comes in and starts the dialog: "Little bears, wait a little, I want to make your pieces equal" "Come off it fox, how are you going to do that?", the curious bears asked. "It's easy", said the fox. "If the mass of a certain piece is divisible by two, then I can eat exactly a half of the piece. If the mass of a certain piece is divisible by three, then I can eat exactly two-thirds, and if the mass is divisible by five, then I can eat four-fifths. I'll eat a little here and there and make the pieces equal".

The little bears realize that the fox's proposal contains a catch. But at the same time they realize that they can not make the two pieces equal themselves. So they agreed to her proposal, but on one condition: the fox should make the pieces equal as quickly as possible. Find the minimum number of operations the fox needs to make pieces equal.

## Input

The first line contains two space-separated integers $a$ and $b$ ($1 \le a, b \le 10^9$).

## Output

If the fox is lying to the little bears and it is impossible to make the pieces equal, print `-1`. Otherwise, print the required minimum number of operations. If the pieces of the cheese are initially equal, the required number is 0.

### Examples

**input**

Copy

```
15 20
```

**output**

Copy

```
3
```

**input**

Copy

```
14 8
```

**output**

Copy

```
-1
```

**input**

Copy

```
6 6
```

**output**

Copy

```
0
```