

## Problem C. Matryoshka Dolls

**Time limit** 1000 ms  
**Mem limit** 262144 kB  
**OS** Windows

Matryoshka Dolls are Russia's most popular souvenirs. They are sets of wooden figurines of decreasing size placed one inside another, though they have the same exact shape.

Our Matryoshka Doll is known to have an **integer** size  $S$  which is the largest doll size in the collection, and each doll should have size  $X$  times less than the doll that holds it (size of the doll  $\leq \frac{\text{size of the doll that holds it}}{X}$ ).

Given  $S$  and  $X$ , What is the maximum number of dolls that can be nested inside each other.



### Input

The first and only line contains 2 integers  $S, X$  ( $1 \leq S \leq 10^9, 2 \leq X \leq 10^9$ ).

### Output

Output one integer, the maximum number of dolls.

### Sample 1

Input	Output
10 2	4