

Problem 5 : Keep the power

Statement

Eldia エルディア was a great and ancient nation which is chiefly populated by the Subjects of Ymir that destroyed **Marley** and came to rule the whole continent. That is when the Dark Ages began.

Eldians formed a race that used to be able to turn into titans if injected with a serum, they used those titans to force their surrounding power, slaughtering people and taking their land. Eventually, the **Eldian Empire** grew unstable due to internal conflicts between the families with the power of titans, **y** is the number of the population of non-eldians, considered enemies!

Given **x** the number of childs for each Eldian, What is the number **n** of the first generation that makes Eldians more than the rest of the world ?

Input

x the number of childs for each eldian. (**Real Number**)

y is the number of population of non-eldians, (**Real Number**)

Output

Which generation **n**, Eldian achieve the biggest population among others? (**Integer**)

Example



Input	Output
2 30	5