

## H Human Pyramid

Time limit: 1s

As chairman of the Building A Pyramid Committee, you are specialized in breaking one specific world record: building the highest human pyramid. Unfortunately, you only know a limited number of people who are willing to be in the pyramid. After all, building human pyramids does not make much money, so most people are volunteers.



An example of a non-world record breaking pyramid. CC BY-SA 3.0 by Amotoki on Wikimedia Commons.

A full human pyramid of height  $h$  consists of  $h$  layers of people. As seen from below, it has  $h$  people on the first layer,  $h - 1$  on the second,  $h - 2$  on the third, and so forth until eventually the final layer has just a single person. To determine whether you can break the world record, you need to know how high a pyramid you can build. Given how many people are available, how tall is the highest possible human pyramid that these people can make?

### Input

The input consists of:

- One line with an integer  $n$  ( $1 \leq n \leq 10^{12}$ ), the number of people available to build the pyramid.

### Output

Output the height of the highest possible pyramid you can build with  $n$  people.

#### Sample Input 1

3	
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#### Sample Output 1

	2
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#### Sample Input 2

12	
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#### Sample Output 2

	4
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