# Halloween party



## **Problem Statement**

Alex is attending a Halloween party with his girlfriend Silvia. At the party, Silvia spots a giant chocolate bar. If the chocolate can be served as only  $1 \times 1$  sized pieces and Alex can cut the chocolate bar exactly K times, what is the maximum number of chocolate pieces Alex can cut and give Silvia?

## **Input Format**

The first line contains an integer T, the number of test cases. T lines follow. Each line contains an integer K

# **Output Format**

T lines. Each line contains an integer that denotes the maximum number of pieces that can be obtained for each test case.

#### **Constraints**

1 <= T <= 10 $2 <= K <= 10^7$ 

## Note

Chocolate must be served in size of 1 x 1 size pieces.

Alex can't relocate any of the pieces, nor can he place any piece on top of another.

# Sample Input #00

4			
5			
6			
7			
8			

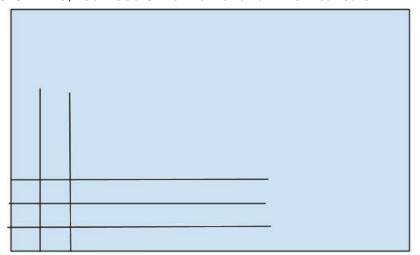
## Sample Output #00

6			
9			
12			
16			

## **Explanation**

The explanation below is for the first two test-cases. The rest of them follow a similar logic.

For the first test-case where K = 5, You need 3 Horizontal and 2 vertical cuts.



For the second test-case where $K = 6$ , You need 3 Horizontal and 3 vertical cuts.						