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 x 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
```

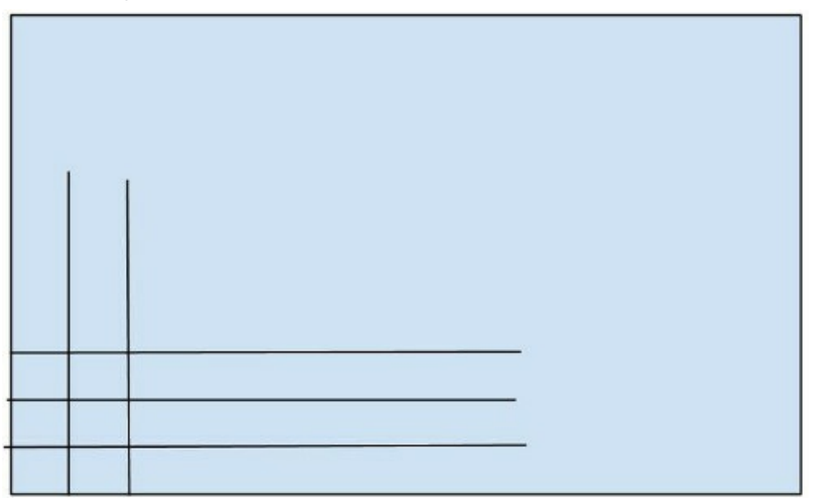
Sample Output #00

```
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.