**Maximum Area**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

Given the maximum possible area of the right angle triangle for a fixed length of hypotenuse. The task is to find the length of hypotenuse.

**Input:**

The first line of the input contains an integer T, denoting the number of test cases. Then T test cases follow. Each test case consists of a single integer N (Denoting the area of the right angle triangle)  
**Output:**

Corresponding to each test case, print in a new line the length of hypotenuse if output is in decimal return floor value.  
**Constraints:**

1≤T≤100  
1≤N≤1010

Sample Input  
1  
25

Sample Output  
10

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=1334>

#include<stdio.h>

#include<math.h>

#include <iostream>

#include<cmath>

#define ll long long int

using namespace std;

int main()

{

int t;

scanf("%d",&t);

while(t--) {

ll n;

cin >> n;

double x = sqrt(2 \* n);

double h = floor( sqrt(2) \* x );

cout << h << endl;

}

return 0;

}