**[The Modulo Task]**

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Ishaan has been given a task by his teacher. He is given an integer N and asked to find some integer **K for which N%K is the largest ( 1 <= K < N),**where % stands for modulo.Ishaan has to complete this task as soon as possible, so help him do this.

**Input :**  
The first line of input contains a single integer T denoting the number of test cases.Each test case contains an integer N.

**Output :**  
For each test case, print the required answer in a new line.

**Constraints :   
1 <= T <= 200  
2 <= N <= 10^12**

**Example :   
Input :**  
3  
7  
8  
6  
**Output :**  
4  
5  
4

**Explanation :**  
Case 1 :   
7%1 = 0  
7%2 = 1  
7%3 = 1  
7%4 = 3  
7%5 = 2  
7%6 = 1

Case 2 :   
8%1 = 0  
8%2 = 0  
8%3 = 2  
8%4 = 0  
8%5 = 3  
8%6 = 2  
8%7 = 1

\*\* For More Input/Output Examples Use ['Expected Output'](https://practice.geeksforgeeks.org/problems/the-modulo-task/0#ExpectOP) option \*\*

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<https://practice.geeksforgeeks.org/problems/the-modulo-task/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp111

{

class Program

{

static void Main(string[] args)

{

int t = int.Parse(Console.ReadLine());

while (t-- > 0)

{

long n = long.Parse(Console.ReadLine().Trim());

Console.WriteLine(n / 2 + 1);

}

Console.ReadLine();

}

}

}

Propiedades del resto o residuo

<https://soloformulas.com/propiedades-del-resto-o-residuo.html>

1° El resto siempre es menor que el dividendo

2° El resto siempre debe ser menor que la mitad del  
dividendo:  
  
3° El resto máximo siempre será igual al divisor  
menos uno:  
  
4° La suma de los valores absolutos de los restos por  
defecto y por exceso siempre es igual al divisor.