# **Maximum Draws**



A person is getting ready to leave and needs a pair of matching socks. If there are n colors of socks in the drawer, how many socks need to be removed to be certain of having a matching pair?

# Example n=2

There are  ${\bf 2}$  colors of socks in the drawer. If they remove  ${\bf 2}$  socks, they may not match. The minimum number to insure success is  ${\bf 3}$ .

# **Function Description**

Complete the *maximumDraws* function in the editor below.

maximumDraws has the following parameter:

• *int n:* the number of colors of socks

#### Returns

• int: the minimum number of socks to remove to guarantee a matching pair.

### **Input Format**

The first line contains the number of test cases, t. Each of the following t lines contains an integer n.

#### **Constraints**

 $1 \le t \le 1000 \\ 0 < n < 10^6$ 

#### **Sample Input**

2 1 2

### **Sample Output**

2 3

# **Explanation**

Case 1: Only 1 color of sock is in the drawer. Any 2 will match.

Case 2 : 2 colors of socks are in the drawer. The first two removed may not match. At least  $\bf 3$  socks need to be removed to guarantee success.