K NUMBERS

Problem statement:

You are given N numbers from 1 to N. Now, your task is to choose some numbers from the N numbers (including 1 & N) such that no two numbers are **consecutive.** As this is easy, you are given an extra task. You have to definitely choose K numbers which are given. Find the maximum number of numbers that you can choose in such a way.

Input:

The first line has an integer T, the number of test cases.

Then for each test case, the first line has two integers N and K.

Then the next line has K numbers which you should definitely chooose.

Output:

For each test case, print the maximum number of numbers that you can choose.

Constraints:

$1 <= T <= 100$

$2 <= N <= 2 \times 10^6$

$1 <= K <= N / 2$

$1 <= X[1...K] <= N$

Sample input:

1

8 2

6 2

Sample output: