UVa Online Judge

10050 Hartals

A social research organization has determined a simple set of parameters to simulate the behavior of the political parties of our country. One of the parameters is a positive integer h (called the *hartal parameter*) that denotes the average number of days between two successive *hartals* (strikes) called by the corresponding party. Though the parameter is far too simple to be flawless, it can still be used to forecast the damages caused by *hartals*. The following example will give you a clear idea:

Consider three political parties. Assume $h_1 = 3$, $h_2 = 4$ and $h_3 = 8$ where h_i is the *hartal parameter* for party i ($i = 1, 2, 3$). Now, we will simulate the behavior of these three parties for $N = 14$ days. One must always start the simulation on a Sunday and assume that there will be no *hartals* on weekly holidays (on Fridays and Saturdays).

Days	1 Su	2 Mo	3 Tu	4 We	5 Th	6 Fr	7 Sa	8 Su	9 Mo	10 Tu	11 We	12 Th	13 Fr	14 Sa
Party 1			x			x			x			x		
Party 2				x				x				x		
Party 3								x						
Hartals			1	2				3	4			5		

The simulation above shows that there will be exactly 5 *hartals* (on days 3, 4, 8, 9 and 12) in 14 days. There will be no *hartal* on day 6 since it is a Friday. Hence we lose 5 working days in 2 weeks.

In this problem, given the hartal parameters for several political parties and the value of N, your job is to determine the number of working days we lose in those N days.

Input

The first line of the input consists of a single integer T giving the number of test cases to follow.

The first line of each test case contains an integer N ($7 \leq N \leq 3650$) giving the number of days over which the simulation must be run. The next line contains another integer P ($1 \leq P \leq 100$) representing the number of political parties in this case. The ith of the next P lines contains a positive integer h_i (which will never be a multiple of 7) giving the *hartal parameter* for party i ($1 \leq i \leq P$).

Output

For each test case in the input output the number of working days we lose. Each output must be on a separate line.

Sample Input

```
2
14
3
3
4
8
100
4
```

```
12
15
25
40
```

Sample Output

```
5
15
```