Grades

You have n grades in Mathematics - $x_1, x_2, \dots, x_n$ - which can be only the natural numbers $2, 3, 4, 5, 6$ and you want a GPA of at least 5.50. Find the minimum number of additional grades that you need. Answer t such tests.

Input

The first line of the file **grades.in** contains the number t. Then, for each test, the next line contains the number n, followed by a line of n natural numbers $x_1, x_2, \dots, x_n$.

Output

On t lines in the **grades.out** file, print the minimum number of additional grades for each test.

Constraints

$1 \leq n, t \leq 200$

$2 \leq x_i \leq 6$

Time limit: 0.2 sec.
Memory limit: 256 MB.

Sample test

Input (grades.in)	Output (grades.out)
3	7
1	2
2	0
2	
4 6	
1	
6	