10370 Above Average

It is said that 90% of frosh expect to be above average in their class. You are to provide a reality check.

Input

The first line of standard input contains an integer C, the number of test cases. C data sets follow. Each data set begins with an integer, N, the number of people in the class ($1 \leq N \leq 1000$). N integers follow, separated by spaces or newlines, each giving the final grade (an integer between 0 and 100) of a student in the class.

Output

For each case you are to output a line giving the percentage of students whose grade is above average, rounded to 3 decimal places.

Sample Input

```
5
5 50 50 70 80 100
7 100 95 90 80 70 60 50
3 70 90 80
3 70 90 81
9 100 99 98 97 96 95 94 93 91
```

Sample Output

```
40.000%
57.143%
33.333%
66.667%
55.556%
```