Average is a good estimator for showing the performance of a class. The number of students whose scores are below average may give us a hint about the distribution of students' performance. Please write a program to help the calculation of average and calculate the percentage of students whose scores are below average.

Input

The first input contains an integer, denoting the number of cases. Each case contains ten integers, representing the scores for the ten students.

Output

For each case, output the percentage of students whose scores are below average. Each case should be in a separate line.

Sample Input

2
41 67 34 0 69 24 78 58 62 64
5 45 81 27 61 91 95 42 27 36

Sample Output

40.00%
60.00%