

GPA Computation

Problem ID: gpacomputation
Time limit: 1 second

Lydia wants to know if she is valedictorian!

Lydia's school computes the grade point averages of its students as follows - for each class that a student takes, they get assigned a letter grade from A to E. An A is worth 4 points, a B is worth 3 points, a C is worth 2 points, a D is worth 1 point, and an E is worth no points. The *unweighted* grade point average is therefore derived by computing the sum of these point values and dividing by the number of classes Lydia took.

To compute the *weighted* grade point average, each of the classes is assigned a tier from 1 to 3. If a student gets an A, B, or C in a tier 1 class, they get an additive bonus of 0.05 points. If a student gets an A, B, or C in a tier 2 class, they get an additive bonus of 0.025 points. These are the only ways to get additive bonuses. The *weighted* grade point average is computed by adding together all the additive bonuses to the *unweighted* grade point average.

Given Lydia's transcript, compute her weighted grade point average!

Input

The first line of input contains a single integer, n ($1 \leq n \leq 50$).

Each of the next n lines contains a two-character string, the letter grade for one of the classes Lydia took followed by the tier of the class. It is guaranteed the first character will be in ABCDE and the second character will be in 123.

Output

Output a single number, Lydia's weighted grade point average. Your answer will be considered correct if it has absolute or relative error at most 10^{-6} .

Sample Input 1	Sample Output 1
5 A1 B2 C3 D1 E2	2.075
Sample Input 2	Sample Output 2
3 A3 E3 D3	1.6666666666666667