C: GPA Computation

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