Broken Calculator

Abdullah has a calculator of NASIO brand. (Why NASIO not CASIO is one of the top 10 questions science cannot answer.)

For the last few days his calculator is giving some weird answers while doing any mathematical operations. Some examples are:

- 1 1 = 15
- 2 + 2 = 65
- 3 3 = 11
- 4 + 4 = 113
- 5 + 7 = 163
- 12 4 = 97
- 23 * 11 = 36196
- \bullet 5 / 2 = 19.115385

Given the operation find what Abdullah's calculator will show.

NOTE: For a division operation Abdullah's calculator rounds up his result 6 digits after decimal point, and for others he just prints a integer what his system gives.

Input

First line contains an integer 0 < t < 10000, number of testcases.

Next t lines contains the operations in any of these formats:

- a + b
- a b
- a * b
- a/b

where a and b are non-negative integers less than 10⁶.

See sample test case for better clarifications.

Output

For each testcase on separate line print what Abdullah's calculator with show.

Example

Input:

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1+2

2*3

3/4

4-5

Output:

54 875 17.634615 -4