

2268 Postfix

A junior high school has found that many of their students have problems with the conceptualisation of mathematical expressions evaluated in postfix. You were contacted by the school to develop a program that could evaluate expressions in postfix, so that the students can practice with it helping them to keep the objectives of the class.

The program was requested by the professor of Mathematics I. For this reason the program should only handle operations with two operands and one operator, real numbers and the four basic operations: addition, subtraction, multiplication and division. An addition request was made. The program could only remember two operands.

Input

The input of the program will be a text file containing the data for several runs.

Each line will have one expression. Each expression will have a valid structure. Each line could be up to 100 characters. The program should stop after processing all the expressions.

All operations will fit into an 8 bytes number (double).

Output

In the output you have to show the result of each expression, one result per line. It should have a four digit precision.

Sample Input

```
123 1254 + 1.254 * 45.87 /  
5 4 +  
5 4 + 1 + 2 + 12 -  
3 2 * 1 - 2 / 3.1415 +
```

Sample Output

```
37.6446  
9.0000  
0.0000  
5.6415
```