



## 4047 - Equation

**Europe - Northeastern Europe - 2007/2008**

Your task is to solve an equation of the form  $f(x) = 0$  where  $f(x)$  is written in postfix notation with numbers, operations  $+$ ,  $-$ ,  $*$ ,  $/$ , and at most one occurrence of a variable  $x$ .

For example,  $f(x)$  for an equation  $(4x + 2)/2 = 0$  is written as:

4	X	*	2	+	2	/
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The solution for  $f(x) = 0$  is  $x = -1/2$ .

### Input

The input file consists of several equations, each of them in a single line with at most 30 tokens separated by spaces. Each token is either:

- a digit from 0 to 9;
- an operation  $+$ ,  $-$ ,  $*$ , or  $/$ ;
- an uppercase letter X that denotes variable  $x$ .

The input file contains a correct representation of  $f(x)$  in postfix notation where token X occurs at most once. There is no division by a constant zero in this equation, that is, there always exists a value of  $x$ , such that  $f(x)$  can be evaluated without division by zero.

### Output

Write to the output file:

- $X = p/q$  if equation  $f(x) = 0$  has a single solution that can be represented with a simple fraction  $p/q$ , where  $p$  and  $q$  are coprime integer numbers and  $q$  is positive.
- NONE if equation  $f(x) = 0$  has no solution;
- MULTIPLE if equation  $f(x) = 0$  has multiple solutions.

### Sample Input

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4 X * 2 + 2 /
2 2 *
0 2 X / *
```

## Sample Output

X = -1/2

NONE

MULTIPLE

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