

# Problem A. Equation

**Time limit** 1000 ms

**Mem limit** 262144 kB

You are given an equation:

$$Ax^2 + Bx + C = 0.$$

Your task is to find the number of distinct roots of the equation and print all of them in ascending order.

## Input

The first line contains three integer numbers  $A$ ,  $B$  and  $C$  ( $-10^5 \leq A, B, C \leq 10^5$ ). Any coefficient may be equal to 0.

## Output

In case of infinite root count print the only integer  $-1$ . In case of no roots print the only integer  $0$ . In other cases print the number of root on the first line and the roots on the following lines in the ascending order. Print roots with at least 5 digits after the decimal point.

## Sample 1

Input	Output
1 -5 6	2 2.0000000000 3.0000000000