# 472 Simultaneous Equations

Write a program that will solve a n by n system of simultaneous equations where the coefficients of the equations are complex numbers. (Recall that a complex number is an imaginary number of the form  $a + b * \sqrt{-1}$ , where a and b are real numbers.)

# Input

The input consists of  $0 < n \le 99$  lines each containing n+1 complex numbers in the form (a,b). The  $j^{th}$ ,  $1 \le j \le n$ , complex number at line i is the coefficient of the  $j^{th}$  unknown in the  $i^{th}$  equation and the last complex number at line i represents the right-hand side of the  $i^{th}$  equation.

# Output

The output consists of n lines containing pairs of the form (a,b). The pair on line i of output represents the i<sup>th</sup> root of the input system of equations. Each pair is to be printed in parenthesis with numbers accurately rounded to one digit to the right of the decimal point, as the sample below.

In case the input system of equations can not be uniquely solved, your program should produce the sentence "No solution" as output.

# Sample Input 1

- (1,0) (2,0) (3,0) (14,0)
- (2,0) (3,0) (4,0) (20,0)
- (3,0) (4,0) (5,0) (26,0)

#### Sample Output 1

- (1.0,0.0)
- (2.0,0.0)
- (3.0,0.0)

# Sample Input 2

- (1,0) (2,0) (3,0) (4,0)
- (2,0) (4,0) (6,0) (8,0)
- (3,0) (4,0) (5,0) (26,0)

#### Sample Output 2

No solution