

Algebra

Jojo got many assignments about linear algebra. Each time, He get 2 linear equation systems and he needs to find the solution. He is very tired of it. One day, he got an idea. "Why don't I just make a program to solve it?". Help him to make sure his program is right!

Format Input

The first line will be an integer T, indicating the number of test cases. In each test case, there are 2 lines. Each line consists of 3 integers a_i , b_i , and c_i , indicating the coefficient of variable x, y, and the value of the system. In mathematics, we can write it into:

$$a_{1x} + b_{1y} = c_1$$

$$a_{2x} + b_{2y} = c_2$$

Format Output

For each test case, output the solution. The output floating point number will always have four digits after the decimal point as shown in the sample output. You may assume that there is a unique solution.

Constraints

$1 \leq T \leq 10$

$1 \leq a_i, b_i, c_i \leq 1000$

Sample Input	Sample Output
1 3 2 12 1 1 5	Case #1: x = 2.0000 y = 3.0000