PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

C. Commentator problem

time limit per test: 1 second

memory limit per test: 64 megabytes

The Olympic Games in Bercouver are in full swing now. Here everyone has their own objectives: sportsmen compete for medals, and sport commentators compete for more convenient positions to give a running commentary. Today the main sport events take place at three round stadiums, and the commentator's objective is to choose the best point of observation, that is to say the point from where all the three stadiums can be observed. As all the sport competitions are of the same importance, the stadiums should be observed at the same angle. If the number of points meeting the conditions is more than one, the point with the maximum angle of observation is prefered.

Would you, please, help the famous Berland commentator G. Berniev to find the best point of observation. It should be noted, that the stadiums do not hide each other, the commentator can easily see one stadium through the other.

Input

The input data consists of three lines, each of them describes the position of one stadium. The lines have the format x, y, r, where (x, y) are the coordinates of the stadium's center ($-10^3 \le x, y \le 10^3$), and r ($1 \le r \le 10^3$) is its radius. All the numbers in the input data are integer, stadiums do not have common points, and their centers are not on the same line.

Output

Print the coordinates of the required point with five digits after the decimal point. If there is no answer meeting the conditions, the program shouldn't print anything. The output data should be left blank.

Examples

input	Copy
0 0 10 60 0 10 30 30 10	

output	Copy
30.00000 0.00000	

→ Virtual participation ⌄

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest]

→ Clone Contest to Mashup ⌄

You can clone this contest to a mashup.

[Clone Contest]

→ Submit?

Language: GNU G++23 14.2 (64 bit, ms ⌄)

Choose file: [Choose File] No file chosen

[Submit]

→ Last submissions

Submission	Time	Verdict
316111076	Apr/18/2025 18:05	**Accepted**
316107647	Apr/18/2025 17:38	Wrong answer on test 10
316107233	Apr/18/2025 17:35	Wrong answer on test 10
316106358	Apr/18/2025 17:27	Wrong answer on test 10

→ Problem tags

geometry *2600

No tag edit access

→ Contest materials

- Codeforces Beta Round #2 ✕
- Tutorial #1 ✕
- Tutorial #2 ✕

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