

Competitive Programming SS24

Submit until end of contest



Problem: circle (1.0 second timelimit)

You are given two circles. Output the number of points where the circles intersect.

Input The input starts with a line containing a single integer t ($1 \leq t \leq 10^4$) the number of test cases that follow.

Each test case consists of two lines, each containing 3 integers x, y, r ($-10^9 \leq x, y \leq 10^9; 0 \leq r \leq 10^9$), describing the center and radius of a circle.

Output For each test case print a single number i , the number of intersections or ∞ if there are infinitely many intersections.

Sample input

```
3
2 2 1
2 5 3
6 8 10
4 3 1
1 1 2
1 1 2
```

Sample output

```
2
0
∞∞
```