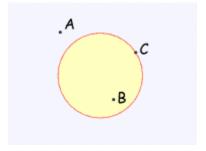


Back to School

When we were young students in school we did many wonderful math but most of us forget it over time. Sometimes is it nice to recall those memories and refresh our math a bit. In today's contest we will try something like that.

Consider you are given information about a circle (center and radius) and you are given information of a point (coordinate), you have to tell whether the point is outside the circle, or inside the circle or on the circle. If the point is on the perimeter of the circle then it is consider on the circle.



In this example, **A** is outside the circle, **B** is inside the circle and **C** is on the circle.

Input:

First line of the input will consist of an integer which represent the test case **T** (0 < T <= 100). Each test case contains 5 numbers C_x , C_y , R, P_x , P_y . Here C_x , C_y are two non-negative integers that represents the coordinate of the center of the circle, R is a double (R > 0) representing radius of the circle. P_x , P_y are two non-negative integers representing the coordinate of the point to investigate. C_x , C_y , R, P_x , P_y all will be less than 1000.

Output:

For each test case print "Case X: Y" (without quotes) where X is the number of test case (start from 1). And Y will be either "Outside", or "Inside", or "OnCircle" (without quotation marks) depending on the outcome of your investigation.

Please check sample input/output to understand the format.

| Sample Input | Sample Output | |
|--|------------------|--|
| 3 | Case 1: Outside | |
| 305 233 233.83 52 877 | Case 2: Inside | |
| 213 351 733.20 125 986 0 25 25.00 0 0 | Case 3: OnCircle | |



Limits:

| Language | Time | Memory |
|----------|----------|--------|
| С | 1 Second | 50MB |
| C++ | 1 Second | 50MB |
| Java | 4 Second | 50MB |
| C# | 4 Second | 50MB |

For Java, use main as class name, do not mark your class as public and do not use custom package. Follow Ideone rule for java compilation, if you get compile error, try your code in ideone.com to see your problem.