Problem K: Cell Coverage

Source file: `coverage.{c, cpp, java}`
Input file: `coverage.in`

A cell phone company is evaluating building a new base station and wants your help. The company knows the geographical distribution of users but needs to determine how many users (mobile stations) a base station with a given range will serve.

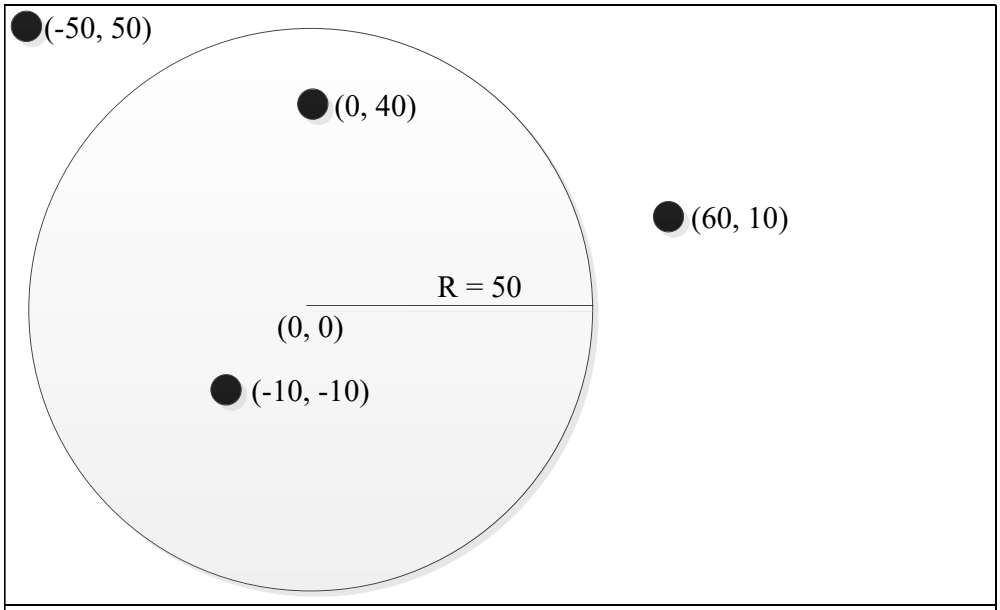

Figure 1: 2 users out of 4 users are covered by a base station with range 50.

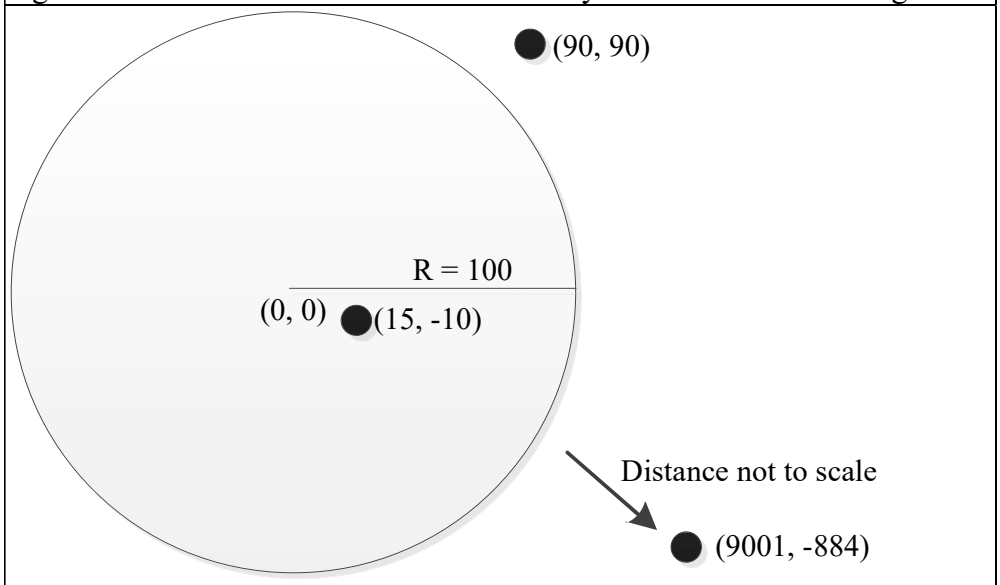

Figure 2: 1 user out of 3 users is covered by a base station with range 100.

No users will be located precisely on the border of coverage. A user at point (0, 0) is within range of the base station.

Input: The first line of the input is the number of datasets, N, $1 \leq N \leq 50$. The first line of each set of data has two integers, R and C, such that $0 < R < 1000$ and $0 < C < 100$. R is the radius of the circle of coverage provided by the base station centered at coordinates (0, 0). C is the number of users.

C lines follow, each of which contains two integers X and Y, such that $-100000 < X < 100000$ and $-100000 < Y < 100000$. Each line defines a user at coordinates (X, Y).

The end of the input file is designated by a line containing the value 0.

Output: For each base station, print how many of the specified users are within the range of the base station.

Example input:	**Example output:**
2 50 4 -10 -10 60 10 0 40 -50 50 100 3 9001 -884 15 -10 90 90 0	2 1