Euclidean and Manhattan Distance AZ101

? Ask Doubt

Time-Limit: 1 sec Score: 100.00/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100

Description

You are given two points on a 2-D plane. You have to find the euclidean and manhattan distance between the two points.

Input Format

The first line of the input contains one integer T - the number of test cases. Then T test cases follow.

The first line of each test case contains four space-separated integers X_1, Y_1, X_2, Y_2.

Output Format

For each test case, print the euclidean and manhattan distance between the two points on a new line. The answer should contain 7 decimal places after round-off.

Constraints

$1 \le T \le 10^5$

$-10^6 \le X_1, Y_1, X_2, Y_2 \le 10^6$

Sample Input 1

Copy

```
3
0 0 2 2
1 2 5 5
4 1 -8 2
```

Sample Output 1

Copy

```
2.8284271 4.0000000
5.0000000 7.0000000
12.0415946 13.0000000
```

Note

This problem is for **educational purpose,** use **double instead of long double** to store the intermediate values. In the case of a problem where you are being asked to round-off and match the exact numbers till some places after the decimal, you will have to

C++14[GCC]

Submit

```
1
```