

Distance between 2 points

Given coordinates of 2 points on a cartesian plane, output the distance between them rounded up to nearest integer.

Input:

The first line of the input contains the number of test cases T. Each line contains 4 integers denoting those 2 points as (x1,y1), (x2,y2).

Output:

For each test case print in a single line the distance between the two points.

Constraints:

$$1 \leq T \leq 100$$

$$-1000000 \leq x1, x2, y1, y2 \leq 1000000$$

Example:

Input:

```
4
0 0 2 -2
-20 23 -15 68
30 37 79 -51
-69 63 57 11
```

Output:

```
3
45
101
136
```