

Find the Point



Consider two points, $p = (p_x, p_y)$ and $q = (q_x, q_y)$. We consider the inversion or [point reflection](#), $r = (r_x, r_y)$, of point p across point q to be a 180° rotation of point p around q .

Given n sets of points p and q , find r for each pair of points and print two space-separated integers denoting the respective values of r_x and r_y on a new line.

Input Format

The first line contains an integer, n , denoting the number of sets of points.

Each of the n subsequent lines contains four space-separated integers describing the respective values of p_x , p_y , q_x , and q_y defining points $p = (p_x, p_y)$ and $q = (q_x, q_y)$.

Constraints

- $1 \leq n \leq 15$
- $-100 \leq p_x, p_y, q_x, q_y \leq 100$

Output Format

For each pair of points p and q , print the corresponding respective values of r_x and r_y as two space-separated integers on a new line.

Sample Input

```
2
0 0 1 1
1 1 2 2
```

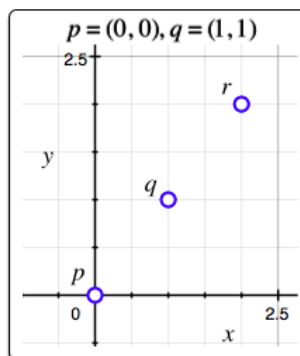
Sample Output

```
2 2
3 3
```

Explanation

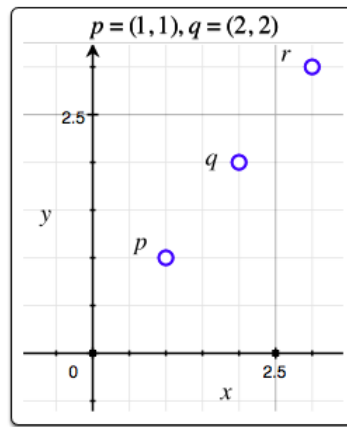
The graphs below depict points p , q , and r for the $n = 2$ points given as *Sample Input*:

1.



Thus, we print r_x and r_y as **2 2** on a new line.

2.



Thus, we print r_x and r_y as **3 3** on a new line.