Draw a triangle

Input file:	**standard input**
Output file:	**standard output**
Time limit:	1 second
Memory limit:	512 megabytes

Little Desprado2 is a student of Springfield Flowers Kindergarten. On this day, he had just learned how to draw triangles on grid coordinate paper. However, he soon found it very dull, so he came up with a more interesting question:

He had drawn two integral points of the triangle on the grid paper, and he denotes them (x_1, y_1) and (x_2, y_2). Now, he wanted to know the answer to the following question: where can he draw the third point (x_3, y_3) so that the area of the triangle is positive but minimized?

Obviously, he can't solve this problem because he is too young and simple. Can you tell him the answer?

Please note that your answer's coordinates must consist of integers because he is drawing on grid paper, and the triangle shouldn't be a degenerated triangle to keep the area positive.

Input

The first line contains one integer T ($1 \le T \le 50\,000$), denoting the number of Little Desprado2's queries.

For each test case, there's a single line contains four integers x_1, y_1, x_2, y_2 ($-10^9 \le x_1,\ y_1,\ x_2,\ y_2 \le 10^9$) seperated by spaces, denoting two points are at (x_1, y_1) and (x_2, y_2), respectively.

It is guaranteed that the two points won't coincide.

Output

For each test case, print two integers x_3, y_3 ($-10^{18} \le x_3,\ y_3 \le 10^{18}$) in a separated line, denoting your answer.

If there are multiple answers, you can print any one of them. It is guaranteed that there exists a solution in the above range.

Example

standard input	standard output
3	2 0
1 0 1 4	1 1
0 1 0 9	-1 0
0 0 2 2	