

# Rectangle

Input file:            **standard input**  
Output file:        **standard output**  
Time limit:         1 second  
Memory limit:      256 megabytes

Given a rectangle represented by four distinct points:  $(x_1, y_1)$ ,  $(x_2, y_2)$ ,  $(x_3, y_3)$  and  $(x_4, y_4)$ , With two sides parallel to the Y-axis and the other two parallel to the X-axis and  $N$  points, for each point check whether it belongs to the rectangle or not.

## Input

First line contains  $x_1, y_1, x_2, y_2, x_3, y_3, x_4$  and  $y_4$  ,  $(-10^5 \leq x_1, y_1, x_2, y_2, x_3, y_3, x_4, y_4 \leq 10^5)$ .

Second line contains  $N$ ,  $(1 \leq N \leq 10)$ .

Next  $N$  lines will contain one point  $(x_i, y_i)$ ,  $(-10^5 \leq x_i, y_i \leq 10^5)$ .

## Output

For each  $N$  lines print “**YES**” if the  $i_{th}$  point belongs to the rectangle and “**NO**” otherwise.

## Example

standard input	standard output
0 0 0 2 2 0 2 2	YES
3	NO
1 1	YES
1 5	
0 0	