

E: Konoha Training

Saitama is a transfer student and new member of Konoha Academy. He is learning some hand seals and just mastered a fire technique named *Punch*. This technique can be described as a **linear** beam of force projected from his body towards a specific target. While training, his professor will select a target walking x steps horizontally from Saitama, and y steps vertically.



Last week Saitama's professor leveled up his training by creating an invisible **wall-shield** on the field from point (X_1, Y_1) to (X_2, Y_2) . Only the professor knows its location, but since the field is a huge terrain (and there could be casualties), he wants to know beforehand if Saitama will hit the target. We will assume that striking the endpoint of a wall also qualifies as striking the wall. If the target is located on the shield, the Punch will count as a hit.

Input

The first line contains the number of test cases T (up to 20), and each test case consists of a line with six integers, x_1, y_1, x_2, y_2, x, y . Therefore, (x_1, y_1) and (x_2, y_2) are the endpoints of the wall-shield, and (x, y) is the target's position.

Saitama is always at position $(0,0)$ and $0 \leq |x_1|, |y_1|, |x_2|, |y_2|, |x|, |y| \leq 10^6$

Output

Print one line per test case containing "YES", if Saitama can hit the target, or "NO" in case the shield will stop the *Punch*.

Sample Input

```
5
2 3 3 2 3 3
-1 1 1 1 1 -1
1 1 2 2 3 3
2 2 3 3 1 1
0 1 1 1 0 2
```

Sample Output

```
NO
YES
NO
YES
NO
```