

The 2021 Freshman Programming Contest

Hunan University



Problem C

Rain_w and Lines

Time Limit: 1 second Memory Limit: 256 MB

Description

Rain_w gives you two different points $P(x_1, y_1), Q(x_2, y_2)$ and a line $l: Ax + By + C = 0$. She wants to know if P and Q are on the same side of the line l . Please help her.

Input

The input has multiple test cases.

The first line contains a single integer $T (1 \leq T \leq 10^4)$ - the number of test case.

Next T lines, each line contains 7 integers $x_1, y_1, x_2, y_2, A, B, C (-10^9 \leq x_1, y_1, x_2, y_2, A, B, C \leq 10^9)$. It is guaranteed that $A^2 + B^2 \neq 0, (x_1, y_1) \neq (x_2, y_2)$ and P, Q are **not** on the line l .

Output

The output should contain T lines. Each line should be a string "Yes" if P, Q on the same side of the line l , or a string "No" if P, Q on the different side of the line l .

Sample Input

Output for Sample input

2	No
1 1 -1 -1 1 1 0	Yes
1 1 2 2 1 1 0	