

The Right Triangles

Problem :

Shreyansh is given a list of N triangles. Each triangle is identified by the coordinates of its three corners in the 2-D cartesian plane. His job is to figure out how many of the given triangles are right triangles. A right triangle is a triangle in which one angle is a 90 degree angle. The vertices of the triangles have integer coordinates and all the triangles given are valid (three points aren't collinear).

Input :

The first line of the input contains an integer N denoting the number of triangles. Each of the following N lines contain six space separated integers $x_1 y_1 x_2 y_2 x_3 y_3$ where (x_1, y_1) , (x_2, y_2) and (x_3, y_3) are the vertices of a triangle.

Output :

For each input of the test case, you will print "Yes" if the given triangle is a right angled triangle or "No" if it isn't.

Sample :

Input :

1

0 0 4 0 0 3

Output (According to the input):

Yes

Time Limit :

1 second.

Scoring :

There will be 2 test cases, and you will get 50 marks for each correct output.