1004 Keychains

Time Limit: 2000/1000 MS (Java/Others)

Memory Limit: 262144/262144 K (Java/Others)

Problem Description

Kayzin is a magician. During a performance one day, he took out two keychains and covered them with a cup. He claimed that when the cup were lifted, the two keychains would be interlocked. But because of the poor lighting, the audience can't see clearly, so the audience wants you to figure out whether the two keychains are interlocked. If yes, please print "Yes", otherwise print "No".

A keychain can be described as a circle in 3-dimensional space.

Two keychains are interlocked, if and only if we can't let their center's distance greater than 10^{114514} by moving two keychains without collision.

For the first sample, two keychains are as follows, they are interlocked obviously.
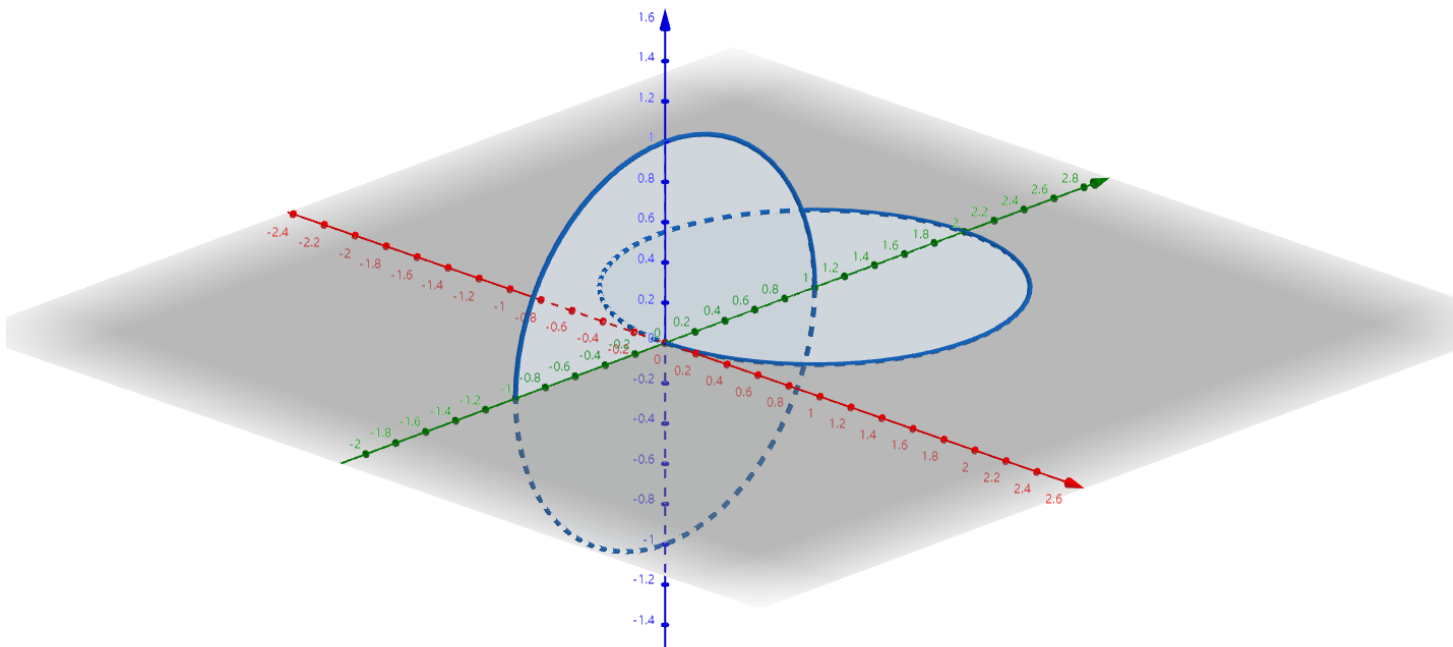
Input

First line is one integer T, indicating T test cases. In each case:

First line is 7 integers $x_1, y_1, z_1, x_2, y_2, z_2, r$, (x_1, y_1, z_1) indicates the coordinate of the center of the first circle, (x_2, y_2, z_2) indicates the normal vector of the plane of the first circle, r indicates the radius of the first circle.

Second line is 7 integers $x_1', y_1', z_1', x_2', y_2', z_2', r'$, (x_1', y_1', z_1') indicates the coordinate of the center of the second circle, (x_2', y_2', z_2') indicates the normal vector of the plane of the second circle, r' indicates the radius of the second circle.

It is guaranteed that the distance between any two points on two circles is not less than 0.1.

$1 \leq T \leq 1000, -1000 \leq x_1, y_1, z_1, x_2, y_2, z_2, x_1', y_1', z_1', x_2', y_2', z_2' \leq 1000, 1 \leq r, r' \leq 1000$

Output

For each test case, print one line, "Yes" or "No", indicating answer.

Sample Input

```
2
0 0 0 1 0 0 1
0 1 0 0 0 1 1
0 0 0 1 0 0 1
0 1 0 0 0 1 10
```

Sample Output

```
Yes
No
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