

# Cube

Input file:            **standard input**  
Output file:           **standard output**  
Time limit:            1 second  
Memory limit:         512 megabytes

You are given eight points in three-dimensional space, please check if they can form a cube.

A cube is a regular hexahedron, bounded by six square faces, with three meeting at each vertex.

## Input

The first line contains a single integer  $T$  ( $1 \leq T \leq 100$ ), denoting the number of test cases.

For each test case, each of the following eight lines containing three integers  $x, y, z$  ( $-100 \leq x, y, z \leq 100$ ), denoting the coordinates of the eight points, respectively.

## Output

For each test case, output a single line “YES” if the points can form a cube, or “NO” if they don’t.

## Example

standard input	standard output
3	NO
0 0 0	YES
0 0 0	NO
0 0 0	
0 0 0	
0 0 0	
0 0 0	
0 0 0	
0 0 0	
-4 -6 -2	
5 9 10	
12 -11 11	
-9 4 8	
-2 -16 9	
7 -1 21	
-7 -6 19	
10 -1 0	
0 0 0	
2 2 1	
0 0 1	
0 2 0	
2 0 0	
0 2 1	
2 0 1	
2 2 0	