The game of Pachinko has been all the rage in Japan for nearly a century. The game is played by shooting a metal ball into a special gaming device, depicted below. The ball then falls from somewhere at the top of the board, bouncing against a series of obstacles on its way down. If the player is lucky, the ball goes into one of the pockets, and additional balls are released as a jackpot. Otherwise, the ball is lost (and the game as well).


Some of the machines at the ICPC parlour have long been suspected of being rigged, as rumour has it that nobody has ever hit the jackpot. A neutral committee has therefore been appointed to verify or refute this claim. As a member, you have taken part in discussions and game trials, all of which have been inconclusive. Much as you enjoyed playing the game for free, after enduring several of the endless meetings you decide it is about time the matter was settled once and for all. To this end, you have taken on the task of writing a program to determine whether the jackpot is reachable or not, based on the specifications of the Pachinko device.

## Input

Your program will be tested on one or more machines. The description of each machine starts with an integer $n(0 \leq n \leq 500)$, indicating the number of segments in it. Each of the following $n$ lines describes a segment by giving 4 real numbers $x$ y $x^{\prime} y^{\prime}$, representing the coordinates $(x, y)$ and $\left(x^{\prime}, y^{\prime}\right)$ of each of its endpoints, where $-100<x<x^{\prime}<100,0<y<100,0<y^{\prime}<100, y \neq y^{\prime}$. No two segments intersect. A blank line follows each case. The last line of input contains ' -1 '.

## Output

For each machine, answer yes if the jackpot is reachable and no otherwise.
Note: See below the pictures corresponding to the three sample input cases.


[^0]
## Sample Output


[^0]:    Sample Input
    2
    $-20602085$
    $-2035105$

    2
    $\begin{array}{llll}-5 & 50 & -20 & 25\end{array}$
    5502025

    7
    $\begin{array}{llll}-20 & 80 & -10 & 75\end{array}$
    $-1565570$
    15752580
    $-5651045$
    $-20 \quad 55-540$
    $\begin{array}{llll}-15 & 20 & 10 & 35\end{array}$
    15302520

