

You throw a bowling ball of diameter 20 cm down a 1.05 meter wide bowling lane at an angle of  $X$  degrees, releasing the ball from the center position of the lane (see diagram).



The lane is equipped with bumpers that bounce the ball off at exactly the same angle as its incoming angle. A single 12 cm wide pin in the head pin position (pin 1) is centered  $T$  meters down the lane. Do you hit the pin?

## Input

Input starts with an integer  $N$  on a line — the number of test cases,  $N$  lines follow. Each test case consist of a floating point number  $T$  (distance between bowling ball and the pin in meters,  $16.0 \leq T \leq 18.0$ ) and an integer  $X$  (the release angle in degrees, measured from the center line,  $10 \leq X \leq 80$ ), separated by space.

## Output

For each test case there will be one line of output. Print either 'yes' if the bowling ball hits the pin. Otherwise print 'no'.

## Sample Input

```
2
18.00 80
16.39 16
```

## Sample Output

```
yes
no
```