# Problem B - Red vs Blue

Ah, finally! Out of Mt. Moon and into Cerulean City. All of your pokemon are nearly fainted and you can't wait to go to the Pokemon centre. But wait... is that your rival Blue? Is he... charging towards you? Seeing as you cannot afford to respawn back in Pewter City, you jump into a nearby pool (because Blue cannot swim).

You find yourself in the middle of a pool shaped like a unit regular $n$-gon (ie. the distance from the centre to each of the corners is 1). As long as you are in the pool, you are safe. But this is not a permanent solution. Blue is eyeing you hungrily from the edge of the pool, waiting you catch you the moment you step out. He can see where you are at all times, but he cannot predict where you are going to go. You know that you'll be able to escape him when you reach land (this makes you question why you jumped into a pool in the first place), but you'll have to get out of the pool without him catching you first!

If you swim at speed **a**, and Blue moves at speed **b**, can you swim out of the pool without meeting Blue? You are allowed to swim around as much as you want in the pool - but Blue will try to position himself to prevent you from getting out.

## Input

The first line contains the integer **T**, then **T** test cases follow.

Each test case contains 3 space-separated numbers **N** ($3 \leq \mathbf{N} \leq 30$), **a** ($0 < a \leq 100$), **b** ($0 \leq b \leq 100$).

**a** and **b** are given to exactly 3 decimal places.

## Output

Output **YES** if you can escape without being caught no matter where they currently are, and **NO** otherwise.

## Sample Input

```
3
4 9.790 14.539
6 22.177 100.000
9 9.566 33.385
```

## Sample Output

```
YES
NO
YES
```